



Civil Engineering

**WORKING IN THE OPERATIONS
MANAGEMENT FIELD**

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This volume in this pamphlet series provides an overview of the functions of the operations management specialist in the Civil Engineer Operations Flight. This pamphlet series supports Air Force Instruction (AFI) 32-1001, *Operations Management*, as the AFI that implements Air Force Policy Directive (AFPD) 32-10, *Installations and Facilities*. Maintain and dispose of records created as a result of prescribed processes in accordance with Air Force Manual (AFMAN) 37-139, *Records Disposition Schedule* (will become AFMAN 33-322 Volume 4).

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Chapter 1

OPERATIONS MANAGEMENT

1.1. Concept. As outlined in AFMAN 36-2108, *Enlisted Classification*, operations management personnel are responsible for activating and managing civil engineer command and control centers during peacetime, wartime, and contingency operations. Operations management processes and controls work requirements in contingency, wartime, and peacetime situations for work performed by civil engineers, as well as maintains accountability of resources.

1.2. Customer Relations.

1.2.1. The civil engineering mission is to provide assets and skilled personnel to prepare and sustain global installations as stationary platforms for the projection of aerospace power in peace and war. By doing this, civil engineers help the Air Force meet its mission of aerospace power. Some functions and roles of the customer service provider are:

- 1.2.1.1. Communicating customer needs.
- 1.2.1.2. Providing a problem-solving service.
- 1.2.1.3. Developing a cooperative working relationship.
- 1.2.1.4. Coordinating and monitoring customer needs.
- 1.2.1.5. Cooperative management.
- 1.2.1.6. Ensuring a professional performance.

1.2.2. There are two primary methods for identification of requirements and initiation of service requests. The most efficient method is for the customer to call or come into the customer service unit (CSU). The second method is to establish a scheduled facility visits program. This methods reduce the number of walk-ins and telephone calls for routine work by letting the customer know when and why service is scheduled.

1.2.3. Communication between the customer and the civil engineer representative is key to developing a successful relationship that meets the customer's needs. Communication also means informing the customer about potential problems that may affect the requested requirement. Issues such as material shortfalls, long lead times, man-hour availability, and specialty crafts or skill level concerns brought to the attention of the customer early in the planning or programming phases will promote customer satisfaction and dissatisfaction after the task or project is started or completed.

1.3. Quality Service.

1.3.1. Quality service involves knowing your customer, the customer's requirements, and meeting those requirements in a timely manner. AFI 32-1001, *Operations Management*, states the Base Civil Engineer (BCE) will establish a process to measure and continuously improve their support of base missions and customers. The purpose of the evaluation program is to motivate timely and quality service to BCE customers. The evaluation program is a management tool that can be used to improve customer relations and productivity of the operations work force.

1.3.2. Customer service monitors the BCE quality control evaluation program and must ensure there are an adequate supply of forms in the service call section, CSU, and the programming and scheduling functions. The worker gives each customer a copy of the form when he or she arrives at the job site. The form should contain the direct schedule or work order number, description of the work or service requested, facility number, and the name of the worker. The remainder of the form is completed later by the customer and sent to the BCE. The BCE's quality control evaluation program reports customer satisfaction and provides to improve civil engineer responsiveness to customers' needs.

1.4. Work Control. The installation will use approved forms to control work requirements, including the following:

- 1.4.1. AF Form 332, **Base Civil Engineer Work Request** - Used to request accomplishment of described work.
- 1.4.2. AF Form 327, **Base Civil Engineer Work Order** - Used to authorize work orders.
- 1.4.3. AF Form 561, **Base Civil Engineer Weekly Work Schedule** - Used by the scheduling function.
- 1.4.4. AF Form 1879, **BCE Job Order Record** - Used to document direct scheduled work (DSW).
- 1.4.5. AF Form 637, **BCE Job Order Log** - Used to assign job order numbers.
- 1.4.6. AF Form 919, **BCE In-Service Work Plan Sheet** - Used by all actual time accounting (ATA) cost centers for the monthly work plan.
- 1.4.7. AF Form 1081, **BCE Work Request/Work Order Register** - Used to log the numbers assigned to work requests and work orders.
- 1.4.8. AF Form 1219, **BCE Multi-Craft Job Order** - Perform periodic visits with facility managers and note minor maintenance and repair requirements.
- 1.4.9. AF Form 1255, **Quality Control Evaluation** - Document work quality.
- 1.4.10. AF Form 1841, **Maintenance Action Sheet** - Record recurring work tasks.
- 1.4.11. AF Form 1445, **Materials and Equipment List** - Document material requirements.
- 1.4.12. AF Form 103, **Base Civil Engineering Work Clearance Request** - Used for work that may disturb aircraft or vehicular traffic flow, base utility services, fire protection and intrusion alarm systems, or other routine activities of the installation.
- 1.4.13. AF Form 2005, **Issue/Turn-In Request** - Used to requisition materials or equipment through the Supply Squadron.
- 1.4.14. AF Form 813, **Request for Environmental Impact Analysis** - Used for energy conservation.
- 1.4.15. DD Form 1348-6, **DOD Single Line Item Requisition System Document** - Used to order materials through the Supply Squadron without a National Stock Number (NSN).
- 1.4.16. DD Form 1348-1A, **Issue Release/Receipt Document** - Used to requisition local manufacture items (manufactured by CE).
- 1.4.17. DD Form 1391, **FY ____ Military Construction Project Data** - Used in association with a military construction project (MCP).

1.4.18. DD Form 2167, **Job Phase Calculation Sheet** – Used to document the work phases.

Chapter 2

SERVICE CALL

2.1. Function. CE maintains a 24-hour-a-day, 7-day-a-week capability to respond to emergency work. The service call function accepts verbal work order requests, including telephone and walk-in customer requests.

2.1.1. The service call function is an integral part of the CSU and typically located nearby.

2.1.2. The service call room should be a soundproof enclosure. It should have a service call window to CSU, adequate space for wall maps, a console designed to accommodate radio and telephone systems, and a secure area for storing keys, portable radios, and battery chargers.

2.1.3. The service call function may serve as the BCE command center during emergency operations. For this purpose, the following information must be readily available:

2.1.3.1. BCE contingency response plan.

2.1.3.2. Base disaster preparedness plan.

2.1.3.3. Base deployment/wing mobility plans.

2.1.3.4. Snow-removal plan, if applicable.

2.1.3.5. Base supplements, BCE operating instructions, checklists, and other instructions for emergency situations.

2.1.3.6. Oil and hazardous substance contingency plan.

2.1.3.7. Utility contingency plan.

2.2. Do-It-Now (DIN) Classification.

2.2.1. The service call operator will determine the classification of the work requested. (DSW classification is outlined in [Chapter 3](#).) If the BCE organization has a DIN function and if the work appears to be within the capability of the DIN worker, the DIN worker is dispatched and the automated civil engineer work order system is updated accordingly.

2.2.2. If the work was attempted but not completed by the DIN, only the actual hours used are entered under labor utilization code (LUC) 12 or 14 (paragraph [6.2](#)). The DIN provides all necessary additional information to make sure the next visit completes the job. If the work requested is beyond the capability of the DIN worker, it is given to the appropriate scheduler/shop foreman.

Chapter 3

DIRECT SCHEDULED WORK (DSW)

3.1. Concept. DSW is a quick method to authorize work that does not exceed 50 man-hours (Air Force Pamphlet [AFPAM] 32-1004, Volume 3, *Working in the Operations Flight Facility Maintenance*, Chapter 4), require detailed planning, or extraordinary material costs. DSWs are classified as emergency, urgent, and routine.

3.1.1. Emergency. An emergency includes, but is not limited to, the failure of any utility, fire protection, environmental controls, security alarms, or a stopped-up sewer. It may also include elimination of fire, health, or safety hazards that have been assigned a risk assessment code (RAC) 1 or fire safety deficiency code (FSDC) I (AFI 32-1001, paragraph 8).

3.1.2. Urgent. Urgent work includes elimination of health, fire, or safety hazards that have been assigned RAC 2 or 3, or FSDC II (AFI 32-1001, paragraph 8).

3.1.3. Routine. Routine work includes hazards that have been assigned RAC 3 or FSDC III or IV (AFI 32-1001, paragraph 8).

3.2. Authorization.

3.2.1. DSW orders are processed in accordance with AFI 32-1001. DSWs are authorized on AF Form 1219, AF Form 1879, or in the automated civil engineer work order system. The Interim Work Management Information System (IWIMS) work control authorization to initiate DSWs is considered an assumption of approval and authorization to complete the work. DSWs are estimated by using the Engineering Performance Standard (EPS) handbooks, when possible. Otherwise, the planning function, if applicable, or shop personnel should provide the estimated time to complete the work.

3.2.2. Notify the financial management and family housing management offices any time work is to be accomplished on general officer quarters (GOQ).

3.3. Unauthorized Use. DSWs are not used to authorize:

3.3.1. Minor construction (MC) work on leased facilities.

3.3.2. Work done by contract, except repair of equipment.

3.3.3. Operations work (authorized by a collection work order number [CWON]) ([Chapter 10](#)).

3.3.4. Services (e.g., street sweeping, grass cutting, snow removal), excluding individual requests for entomology services (authorized by CWON).

3.3.5. Recurring work.

3.3.6. Work that must be capitalized on real property records.

3.4. Cancellation. DSWs are cancelled in accordance with AFI 32-1001, paragraph 9. CSU notifies the customers, in writing when practical, when DSWs are cancelled.

3.5. Processing. DSWs are generated in several different ways: verbal requests; work identified on AF Form 332 and AF Form 1219; electronic mail; and from sources within CE. Care must be taken to ensure

the proper description of work is used on all DSWs. Proper and complete justification can reduce misunderstanding of the full scope of work to be done and the urgency of work. When the work description or justification is vague or confusing, the customer must be contacted for clarification.

3.6. Bill of Materials (BOM). The BOM is used to acquire material needed to complete a DSW (paragraph 8.3.). After the BOM has been prepared, operations management personnel may need to assign a required delivery date (RDD).

3.7. Tracking. Each time the DSW is moved from one location to another it must be tracked. If a DSW is moved for other than normal processing, remarks should be added with a brief reason for the tracking location change.

Chapter 4

WRITTEN WORK REQUESTS

4.1. Purpose. This chapter describes how to prepare and process written requests for work. The suggested procedures are designed to assist the CE organization by clarifying the written work order process.

4.2. CSU. The CSU manages work order requests by:

- 4.2.1. Receiving and tracking all written work requests by assigning a work request number.
- 4.2.2. Receiving in writing delegated approval and disapproval authority.
- 4.2.3. Maintaining the current status of all requests.
- 4.2.4. Providing service to walk-in and telephone customers.

4.3. BCE Work Request. AF Form 332 is used to request and approve all work, except for:

- 4.3.1. Work in excess of the installation commander's (IC) approval level.
- 4.3.2. Work to be funded by the major command (MAJCOM).
- 4.3.3. Work to be done by contract within the IC's approval authority if the MAJCOM requires additional approval documentation.
- 4.3.4. Local manufacture or non-NSN supply or equipment items. These items require the following forms:
 - 4.3.4.1. For non-NSN items, the using activity will submit DD Form 1348-6, **DOD Single Line Item Requisition System Document**, with the necessary drawings, to the Supply Squadron. Drawings and examples need not accompany the DD Form 1348-6 when the remarks block contains a statement that the manufacturing activity currently possesses the necessary documents.
 - 4.3.4.2. For items of local manufacture, a DD Form 1348-1A, **Issue Release/Receipt Document**, endorsed by the Supply Squadron, is also needed. The DD Form 1348-1A is used for receipt or issue transactions on completion of local manufacture and for reimbursement of BCE costs when the customer chooses not to use a government purchasing card (GPC) for a local purchase.
- 4.3.5. Self-help work that is:
 - 4.3.5.1. The tenant's responsibility as defined by the family housing management office.
 - 4.3.5.2. Minor maintenance and repair work done with over-the-counter materials from the self-help store.
- 4.3.6. Work not requiring individual costing that is properly authorized by the collection work order list, AF Form 1219, the recurring work program (RWP), automated or manual DSW not requiring real property capitalization, or changes to as-built drawings.

4.4. BCE Work Request/Work Order Register. CSU uses automated systems or AF Form 1081 for tracking and controlling AF Form 332 and AF Form 327.

4.5. Hazard Correction. All written requests for work that request BCE action for the elimination or correction of hazards are submitted to the BCE by the requester as follows:

- 4.5.1. Fire hazards are coordinated through the Fire Protection Flight for assignment of an FSDC.
- 4.5.2. Health or environmental hazards are coordinated through the base bioenvironmental engineer (usually assigned to the base hospital) for assignment of an Occupational Safety and Health Administration (OSHA) code or RAC.
- 4.5.3. Safety hazards are coordinated through the base, wing, or other authorized safety representative safety office for RAC assignment.
- 4.5.4. Environmental hazards are coordinated through the Environmental Engineering Flight for categorical exclusion (CATEX) or initiation of AF Form 813, **Request for Environmental Impact Analysis**.
- 4.5.5. Airfield work requests and projects must:
 - 4.5.5.1. Be coordinated with the airfield manager and wing safety office.
 - 4.5.5.2. Ensure a temporary waiver is obtained at least 45 days before the scheduled construction start date. **NOTE:** Waivers must be approved before the start of airfield construction activities.
 - 4.5.5.3. Ensure the Federal Aviation Administration (FAA) is notified in accordance with the requirements of Federal Aviation Regulation (FAR) Part 77, *Objects Affecting Navigable Airspace*, Paragraph 77.13 (see Unified Facilities Criteria [UFC] 3-260-01, *Airfield and Heliport Planning and Design*).
 - 4.5.5.4. Ensure construction and design meet frangibility requirements described within UFC 3-260-01.

4.6. Work Request Preparation and Review. The AF Form 332 is prepared as an original and three copies. The CSU personnel will review the request and determine if:

- 4.6.1. The request has been properly prepared and blocks 1 through 14 have been completely filled out. CSU personnel will fill out block 4.
- 4.6.2. The requested work requires an environmental impact. If the work does not automatically qualify for CATEX from further environmental analysis, an AF Form 813 should accompany the AF Form 332.
- 4.6.3. The work is not already identified for a contract or as a duplicate in-service request.
- 4.6.4. The work supports the planned use of the facility.
- 4.6.5. All coordination has been obtained. If additional coordination is needed, CSU may offer to obtain the additional coordination for the customer as provided in AFI 32-1001, paragraph 6. **NOTE:** Fire protection coordination should be obtained on all requested work when either life, safety, fire-alarm or suppression systems, fire rating of materials, fire protection access to an area or facility, or fire protection criteria is affected by the proposed work.
- 4.6.6. The required signature is in block 13. For example, the unit commander must sign all requests for new construction or recoring facility locks.

4.7. Acceptance of the Request. All work requests received are assigned a number from the AF Form 1081. The description of the work request is also entered in the register. CSU personnel will notify the requester when the request is accepted or rejected. If rejected, clearly explain why the request was rejected, and if accepted:

- 4.7.1. The work request may be entered into the appropriate computerized file of the automated civil engineering work order system using work order indicator "D".
- 4.7.2. Use the work request number as the work order number if the work is authorized by an in-service work order or as a DSW. The IWIMS program will assign work request numbers.
- 4.7.3. Set up a work request folder to be used for comments and recommendations on requests that must be sent to BCE functions for review. Place the original AF Form 332 with supporting documents, such as sketches, drawings, maps, or funding letters, in the folder.
- 4.7.4. When the requested work is above the IC's approval authority or class M (maintenance), R (repair), or MC (minor construction) to be funded by the MAJCOM, CSU personnel will send the AF Form 332 to the Engineering Flight.

NOTE: The planning function, Engineering Flight, or maintenance engineering section makes on-site investigations, resource estimates, and technical evaluations when needed to help the reviewer approve the work request.

4.8. Approval.

4.8.1. The approval authority completes AF Form 332 blocks 15 through 30, and assigns the work request priority in accordance with AFI 32-1001, paragraph 8. Approval or disapproval of AF Form 332 may be determined by the following:

4.8.1.1. BCE. Approval authority should be delegated to the lowest level practicable in the BCE organization. Disapproval levels are not normally established, but the BCE may exercise the option to disapprove work requests regardless of their anticipated cost.

4.8.1.2. IC. The IC may make the decision. There are two ways to help the IC achieve corporate agreement on priorities and make recommendations about approval or disapproval of work requests:

4.8.1.2.1. Staff Meetings. Use staff meetings or the commander's update briefing.

4.8.1.2.2. Facilities Utilization Board (FUB). The FUB reviews any request that exceeds installation approval authority or requires funding by the MAJCOM. If the FUB validates the request, the Engineering Flight will process the necessary project documents to the MAJCOM for approval.

4.8.2. CSU personnel will:

4.8.2.1. Update AF Form 1081.

4.8.2.2. Notify the requester of the decision. If approved, explain the subsequent action to complete the work. If disapproved, clearly explain the reason why.

4.8.2.3. Use the following guidance when assigning specific work priorities to work order requirements when a RAC or FSDC has been assigned. **NOTE:** When a RAC, FSDC, or OSHA

code has been assigned to the work request, it is necessary to annotate the number in the appropriate block on AF Form 327.

- 4.8.2.3.1. RAC I - Priority I - FSDC I.
- 4.8.2.3.2. RAC 2 or 3 - Priority II - FSDC II.
- 4.8.2.3.3. RAC 4 - Priority III - FSDC III.
- 4.8.2.3.4. RAC 5 - Priority IV - FSDC IV or V.

4.9. Processing Approved Work Requests. When practicable, like items of work should be grouped for authorization with one document.

4.9.1. Contract Work. Send the AF Form 332 with work to be performed by contract to the contract programmer. CSU may provide the financial manager a block of work order numbers for contract work. When the contract project number is assigned, enter the project number on AF Form 1081 when a manual system is used. Automated versions require the engineering programmer to attach the work order number to the project in the Automated Civil Engineer System Project Manager (ACES PM). Close the work order and return a copy of the AF Form 332 to the customer with the contract project number noted on the form.

4.9.2. Self-help Work. Process self-help work according to local procedures.

Chapter 5

WORK ORDERS

5.1. Concept. AF Form 327 is used to authorize work that needs detailed planning. The decision to use a work order is based on estimated man-hours exceeding 50 hours (but less than 250 to 300 hours), capitalization of real property records, collecting reimbursements, and gathering data for review and analysis. In general, work done by contract is approved on DD Form 1391 or AF Form 332 and funding authorized on AF Form 9, **Request for Purchase**. AF Form 327 is used to collect individual contract costs. Normally, service contracts are approved and authorized on AF Form 327 and funding authorized on AF Form 9.

5.2. BCE Work Order. Use AF Form 327 to authorize:

- 5.2.1. Work by contract, except contract maintenance of equipment.
- 5.2.2. Work (including self-help) requiring capitalization, regardless of the source of funds.
- 5.2.3. Work done by the Engineering Flight on MCP projects when the Air Force is the design agent, and to collect non-BCE costs for work on MCP projects.
- 5.2.4. Work done by the Engineering Flight on military family housing (MFH) projects when the design costs are reimbursable.
- 5.2.5. Architectural and engineering service contracts.
- 5.2.6. Changes to work orders.
- 5.2.7. Any other work where individual costing, detailed planning, or capitalization is required.

5.3. Processing In-service Work Orders. Send the work order package to the planning function or other entity responsible for planning work orders at your installation (**Chapter 7**). The work order status and indicator will remain “D” until authorized to prevent unauthorized charges being placed against the work order.

5.4. Work Order Review.

- 5.4.1. The chief of operations management CSU reviews the entire work order package to determine:
 - 5.4.1.1. The adequacy of the work plan.
 - 5.4.1.2. That an accurate Air Force account code, customer code, and reimbursement refund indicator (RRI) are applied.
 - 5.4.1.3. The need to capitalize work on real property records.
 - 5.4.1.4. The need for special precautionary measures.
 - 5.4.1.5. The required completion date is feasible.
 - 5.4.1.6. The package contains all necessary documentation (AF Form 103, complete BOM, drawings, planning phases and tasks) to commence work.
- 5.4.2. After the chief of operations management CSU reviews the work order package, the work request package will be forwarded to the in-service work package (IWP) programmer.

5.4.3. The IWP programmer will determine when the work should be done. This decision is based on work-hour availability of participating shops, material lead-time, the date requested by the customer, and the priority of the work. The programmer will send the work order to the proper approval authority for authorization.

5.4.4. If funds are available for material or equipment requirements, the approval authority will sign the work order and returns it to the IWP programmer. If funds are not available, the work order will be returned unsigned to the IWP programmer to be held until the funds deficiency is resolved. The IWP programmer will keep the chief of operations management CSU advised of the backlog of work orders awaiting funds. If funds become available, the approval authority will sign the work order, update the automated system as required, and return it to the IWP programmer.

5.4.5. The IWP programmer will update the estimated start and completion date on AF Form 1445, item 19, and on the work order folder. Once authorized, a routine RDD will be assigned and the package tracked to the logistics section. The RDD is established to receive delivery of materials before the estimated start date (ESD). The IWP programmer will work with the logistics function to ensure the timely delivery of materials.

5.4.6. When materials are complete and have been reviewed by planning, the work order will be returned to the IWP programmer. The IWP programmer will validate the programmed start month and release the work order to the scheduler. The scheduler will coordinate with appropriate shop personnel and the customer to schedule the work.

5.5. Special Work Requirements. The shop supervisors must brief their workers on the nature and location of any safety hazards before starting any work that needs special precautions to be applied. An AF Form 103 must be approved before starting any hazardous work.

5.6. Reprogramming a Work Order. If a work order is reprogrammed, the programmer changes the ESD in the automated file or manually in the work order package and notifies the customer of the change.

5.7. Work Order Completion.

5.7.1. When the job is completed, the shop supervisor (or job monitor):

5.7.1.1. Inspects the work for quality and completeness.

5.7.1.2. Makes sure that excess or residue material and equipment are cleaned, inventoried, and labeled with DD Form 1574, **Serviceable Tag - Materiel**. The material and equipment will be turned over to the logistics function for disposition. Materials in quantities less than a unit pack (e.g., partial sheets, coils, or boxes) may be kept in the shop for future use.

5.7.1.3. Reviews material issued for the work order to ensure the quantity and type were commensurate with the work done and the work order folder includes documentation supporting any additional materials requisitioned by shop workers.

5.7.1.4. Documents non-Air Force excess materials or equipment used.

5.7.1.5. Signs AF Form 327 as indicated in the "On-site Coordinator" block and furnishes drawings, sketches, and information needed to update record drawings or RWP records.

5.7.1.6. Returns AF Form 327 and all supporting documents to the scheduler when all the above actions are completed. The package is then sent to the scheduler.

5.7.2. Upon receipt of signed copies of the completed AF Form 327, the scheduler:

- 5.7.2.1. Returns copies of the AF Form 327 and supporting documents to the work order folder.
- 5.7.2.2. Makes sure all the labor, material, and equipment actions that influence the cost of work order or real property records have been reported, including entering the actual costs of installing non-Air Force excess material or equipment. If the actual costs are not known, use the fair market value.
- 5.7.2.3. On receipt of the final BOM closeout, gets the signature of the chief of operations or a designated representative on the original AF Form 327 in the final certification block, and requests a final closeout report.
- 5.7.2.4. Sends a copy of AF Form 327 to the financial management and family housing management offices for work on GOQ.
- 5.7.2.5. Sends the completed work order folder to the CSU.
- 5.7.2.6. Enters the final closeout transaction in the work order folder.
- 5.7.2.7. Sends the work order folder to real estate management if a change to the real property records or record drawings is indicated, and forwards the package for possible voucher number and action.
- 5.7.2.8. Forwards the package to the Engineering Flight's drafting section when as-built drawing updates are required.
- 5.7.2.9. After all actions are completed, the folder is returned to the CSU for final disposition and placed on file in the CSU closeout staging area.

5.8. Change Orders. Process change orders in accordance with AFI 32-1001, paragraph 9.

5.9. Work Order Cancellation. Process cancellations in accordance with AFI 32-1001, paragraph 9.

- 5.9.1. The work order may be cancelled at any time.
- 5.9.2. When proper authority directs cancellation of a work order, CSU (or the financial manager for contract work orders):
 - 5.9.2.1. Contacts each activity and advises them to discontinue any further work.
 - 5.9.2.2. Retrieves all copies of the work order (draft or final) and writes "cancelled" on the original AF Form 327, or types "cancelled" in the remarks section of the automated system.
 - 5.9.2.3. Closes the work order if costs have not been accumulated. If costs have accumulated in the automated system, a normal close transaction will be initiated.
 - 5.9.2.4. Notifies the requester of work order cancellation.
 - 5.9.2.5. Files the work order folder and notifies the programmer of the cancellation.

5.10. Real Property Capitalization. Work orders that change real property records are sent to real estate management for capitalization when the work is completed. Drawings of the area before and after the change need to be included in the package to real estate management. **NOTE:** See AFI 32-1032, Chapter

5 for specific guidance on accomplishing multiple minor military construction projects in a single facility. If the work order involves the following, capitalization is generally required:

- 5.10.1. New construction, including installed equipment, that extends the useful life two or more years and costs \$5,000 or more.
- 5.10.2. Increase in the overall square footage by conversion, extension, addition, expansion, or alteration, including installed equipment, that extends the useful life two or more years and costs \$5,000 or more.
- 5.10.3. Permanently attached installed equipment (addition or removal).
- 5.10.4. Increase or decrease in square yards of pavement surface area.
- 5.10.5. Increase or decrease in linear feet of railroad trackage or appurtenances.
- 5.10.6. Increase or decrease in linear feet of utility infrastructure, including electrical, natural gas, water, sewer, or fuel mains.
- 5.10.7. Increase or decrease in the number of windows, air conditioners, or air-conditioning tonnage.
- 5.10.8. Increase or decrease in the liquid fuel system or pumps, and in linear feet of aboveground exterior fuel pipelines.
- 5.10.9. Increase or decrease in the capacity (British thermal unit per hour [Btuh]) of heating plants.
- 5.10.10. Increase or decrease in the capacity (kilovolt-ampere [kVA]) of substations, or in the number of street lights, linear feet of airfield lighting, number of traffic lights, or number of precision approach path indicator (PAPI) or pulse light approach slope indicator (PLASI) lighting systems.
- 5.10.11. Increase or decrease in electric power generation in aircraft arresting support systems or total number of automatic transfer panels.
- 5.10.12. Increase or decrease in wells, distribution pumps, water storage capacity, treatment plants, pumps, water softness, demineralizers, or sanitary lift stations.

5.11. Work Order Analysis. For completed work orders that have significant variance between actual and estimated hours, a preliminary review will be performed. A significant variance is an amount over or under 25 percent of the original detailed planned estimated or authorized amount. Operations management, in coordination with the appropriate shop supervisors and the planning function, will perform the preliminary review to determine the cause of variance. The results will be documented and made a permanent addition to the work order package.

5.12. Facility Files. There are various ways to maintain facility folders; however, each facility should have a folder or a file kept in the operations management work center. The facility file is a collection point for all documentation and historical data for each facility. Facility files should be purged annually. All documentation older than one year after the closeout date should be purged. Retain copies longer than one year if the historical value supports the procedure. Use facility files to maintain copies of the following documents for each facility or logical group of facilities (requirements may vary from base to base): AF Form 327; DD Form 1391; AF Form 332; AF Form 1219; and disposal plans.

Chapter 6

TIME ACCOUNTING

6.1. Concept. Time accounting is used to distribute hours and costs to work orders and cost account codes. Time accounting is a combination of actual time accounting (ATA) and exceptional time accounting (ETA) reporting systems. Each BCE cost center is assigned one method to report time. All personnel in each cost center will report time the same way, ETA or ATA. It provides data to:

- 6.1.1. Prepare cost estimates, scheduling, and programming work in the IWP.
- 6.1.2. Justify vehicles, budget inputs, and personnel requirements.
- 6.1.3. Analyze and solve problems.

6.2. Labor Utilization Code (LUC). LUCs are codes used to identify direct and indirect work performed by ATA cost centers. The work hours charged against LUCs are also used for analysis purposes.

Table 6.1. Standard LUCs.

Direct	
11	Recurring work
12	Emergency DSW
14	Urgent DSW
15	Minor military construction work order
16	Routine DSW
18	Maintenance, repair, or other work orders
19	Plant operations
20	Readiness training
Indirect	
31	Supervision
32	Training
33	Leave
34	All other
38	Overtime
39	Loaned hours

6.2.1. Recurring work (LUC 11) is repetitive work already identified on the RWP. This is productive work like grass cutting and annual flushing and testing of water hydrants.

6.2.2. Emergency work (LUC 12) requires immediate action, occurs within 24 hours, and normally is identified by telephone contact to operations management. LUC 12 could be a down and arcing high-voltage electrical line (see AFI 32-1001, paragraph 8).

6.2.3. Urgent work (LUC 14) requires action within five days, but does not pose a threat to operational effectiveness or to government property. LUC 14 might be a minor amount of water seeping from the ground (see AFI 32-1001, paragraph 8).

6.2.4. Routine work (LUC 16) is a DSW not qualifying for higher priority. Routine DSWs are either telephoned in to operations management or taken from AF Form 332 (see AFI 32-1001, paragraph 8).

6.2.5. Minor construction (MC) work (LUC 15) is classified as additional real property installed equipment (RPIE) or an increase to the footprint of a facility.

6.2.6. LUC 18 is used on all other maintenance or repair work orders. The work order requires that it be added to part two of AF Form 561.

6.2.7. Utility operations (LUC 19) identifies all labor expended in support of plant or utility operations (e.g., water plant operations).

6.2.8. Readiness training (LUC 20) work orders are established to collect Priority Improved Management Effort – Base Engineer Emergency Force (Prime BEEF) training time at a local station or organized mobility training. LUC 20 is used for field exercises, chemical warfare training, and self-aid and buddy care. LUC 20 is not designed for long-term rotations in and out of theater.

6.2.9. Supervision (LUC 31) is used by the shop supervisor for managerial responsibilities and meetings.

6.2.10. Training (LUC 32) is used when workers are performing their primary duties but are learning the tasks. LUC 32 can also be used to carry Career Development Course (CDC) study time when authorized by the on-duty shop supervisor. Progressive career specialty classroom training should be charged to LUC 32.

6.2.11. Leave (LUC 33) is charged when military or civilian employees are on authorized leave away from the duty section. Sick leave, leave without pay, and regular leave is all charged by LUC 33. Leave is a typical LUC choice to add a special study code to subdivide different types of leave.

6.2.12. LUC 34 collects all other indirect labor time. Examples of LUC 34 are Commander's Call, vehicle lag time, planning functions, military appointments, and three-day passes for military members.

6.2.13. LUC 38 is used to report all overtime (military and civilian) for ATA personnel.

6.2.14. LUC 39 is used when personnel are loaned between BCE cost centers.

6.3. LUC Special Study Codes. Each LUC can be subdivided into nine special study codes (determined by local policy and management practices) to collect more detailed data for analysis. After the needed data is obtained, the special study code should be deleted and the hours reported to the basic LUC. Special study codes should not be used for longer than six months.

6.4. ATA Cost Center. Cost centers that use more than one account code use the ATA method. Cost centers that use the ATA method report direct and indirect hours against work order numbers and LUCs. AF Form 1734 is used to report hours for each operation ATA cost center. Operations cost centers using the scheduler concept report hours daily. Labor reported in shop labor is reported daily. Shop supervisors ensure all time is reported before the close of the day.

6.4.1. **Holiday Leave.** Holiday leave is not reported on AF Form 1734 unless labor is being charged for shift workers.

6.4.2. **Regular Day Off (RDO).** For shift workers such as plant operators, the RDO may occur on a weekday; this is not considered leave. Enter the RDO on the AF Form 1734 remark line at the bottom of the form to show the individual is accounted for, but no time is reported for the day.

6.5. ETA Cost Center. Cost centers that do work related to one BCE or MFH account code use the ETA method. Direct and indirect hours are not reported by ETA cost centers except for hours loaned (LUC 39) between ETA and ATA cost centers. Loaned hours are not reported for ETA-to-ETA cost center assignments, except when assigned to MFH. When assigned to MFH, use loaned hours to ensure all time costs are collected for duties being performed for MFH. Hours for the ETA method are updated by computer. **NOTE:** A cost center can be changed from ETA reporting to ATA reporting if there is a need to collect and use management information on the work performed by the cost center. For example, during base recovery after a natural disaster all ETA cost centers will be loaned to the CE grounds element ATA cost center to perform labor in the recovery efforts.

6.6. Daily Work Schedule. AF Form 561 is used to record the actual hours worked on a weekly basis. One AF Form 1734 is automated for each ATA cost center on a daily basis. Time is accounted on the daily labor sheet that is attached to the weekly schedule. Increments of less than 0.5 hour are not typically used, but may be used for a more precise pinpointing of time.

6.7. Loaned Labor. Generally, personnel are considered on loan when they work for a cost center other than the one to which they are assigned and are performing duties typical to the borrowing cost center. Loan procedures are used for periods involving less than four hours unless it is determined this loan is the most effective and efficient process to do the work.

6.8. Troop/Donated Labor. When a Reserve team or Air National Guard (ANG) unit comes to a base and provides assistance, it is the responsibility of the host base to ensure Troop Labor is not used on normally reimbursable work. When an organization wants to keep track of the total hours spent on BCE work, but not apply the shop rate to the work order or cost system, a non-BCE personnel record is created for labor-reporting purposes. As the non-BCE person performs labor, the donated labor hours are accumulated on the work order at no cost.

Chapter 7

PLANNING

7.1. Concept.

7.1.1. Proper planning provides increased productivity and the efficient use of limited resources. Planning is defined as a means to determine the scope, method, and type of resources needed to complete a specific objective. Long-range planning is a responsibility of all civil engineer personnel. Operations Flight personnel identify major work requirements, perform periodic design reviews, and monitor construction projects to properly identify follow-on operations and maintenance support.

7.1.2. When a work order is in the planning phase, the chief of planning or shop supervisor will assign the work order to a planning technician to finalize the plan. The planner will prepare the job phase sheets and task sequences, provide drawings, prepare the BOM, and coordinate the work order plan with the appropriate shop supervisor. The shop supervisor will initial the AF Form 327 once any disagreements have been resolved; the planning function then sends the work order back to the CSU.

7.2. Planning and Estimating. EPS is the most common method used to develop standard-hour estimates. Locally developed standards, owner manuals, and other methods are also used to provide realistic and manageable estimates.

7.2.1. Material and Equipment Requirements. Identify all material and equipment requirements for individual work orders.

7.2.2. Special Precautionary Planning. Use AF Form 103 as described in paragraph [5.5](#).

Chapter 8

LOGISTICS

8.1. Concept. One method of requisitioning most material needed for civil engineering in-house work is by using AF Form 1445. Another method is to use the computerized Civil Engineer Material Acquisition System (CEMAS). No matter what the method of requisition, a BOM is prepared to identify and order all civil engineer materials using a set format. CE cannot complete work requirements without materials, so materials must be requisitioned in a systematic manner. If your organization uses IWIMS, you must have CEMAS user rights added to your IWIMS user identification to perform any functions in CEMAS. The chief of logistics is the authority for CEMAS user rights.

8.2. Interrelated Logistics Support. The logistics section is the primary focal point for material requirements. The type of support provided is based on the needs of the CE organization and MAJCOM policy. Some types of logistics support are as follows:

8.2.1. CEMAS. This is a computerized system used for identifying, acquiring, and controlling material requirements.

8.2.2. Government-Operated Civil Engineering Supply Store (GOCESS). This is a civil engineering system set up to purchase, receive, maintain, and issue material from within the CE organization.

8.2.3. Contractor-Operated Civil Engineering Supply Store (COCESS). This type of logistics support operates under a contract and requires the base to purchase items through a contractor.

8.2.4. Logistics Civil Engineering Support (LOGCES). This system will only be used by Air Education and Training Command (AETC) BCEs, Supply Squadron, and base contract organizations.

8.2.5. Standard Base Supply System (SBSS). The Chief of Supply is responsible for the acquisition and management of materials at a base.

8.2.6. Shop Stock. These are materials kept in the cost center and used daily for work requirements. These materials are normally kept on DIN trucks for emergency or urgent minor maintenance and repair work.

8.2.7. Centralized Bench Stock. This material is normally kept in the logistics section and is a consolidated supply of material that more than one cost center may use.

8.2.8. Decentralized Bench Stock. This is a supply of material authorized by the logistics section to be maintained in the cost center.

8.2.9. Residue. This is material left over after a work requirement is complete or canceled. It may also include excess material located in the cost centers. All residue items should be turned in to the logistics section for proper processing.

8.3. Material Support. The CE organization performs maintenance, repair, and construction work on Air Force installations. If CE cannot acquire the proper material to accomplish a work requirement then the work cannot be done, so the logistics section must receive the order forms (AF Form 1445, AF Form 2005, and BOM). The RDD must be on the forms. The RDD to let the logistics section know when the materials are needed. The logistics section is the primary focal point for material requirements within the CE organization.

8.3.1. DSW Material Support. If materials are required for a DSW, the necessary material ordering forms are prepared manually or with the IWIMS. When the material ordering forms are ready to go to the logistics section, the RDD is entered and the material ordering forms are forwarded. Once the logistics section receives the materials, the work requirement is scheduled for accomplishment.

8.3.2. Planned Work Order Material Support. The planning function normally prepares ordering forms for planned work orders. Once a planned work order is approved, the material is ordered, the RDD is entered, and the forms sent to the logistics section. The RDD for planned work orders should be 45 days before the estimated start date of the work. After all work order materials are obtained, the planned work order is programmed and scheduled for accomplishment.

Chapter 9

RECURRING WORK PROGRAM (RWP)

9.1. Concept. The RWP is designed to provide CE with an easy-to-update automated program for preventative maintenance activities. It is used to identify recurring maintenance actions to support critical equipment and minimize repair and replacement costs. Effective use of the RWP is critical for minimizing the number of DSWs. Operations management personnel must ensure that the shops have a program established. The shops provide the maintenance action sheets (MAS) and RWP records; however operations management will give computer assistance as needed, and may also give advice as to how the program should be established and what types of items might be included in the RWP. The RWP also can be used as a management tool to identify permanently deferred actions due to lack of manpower, as well as programming hours to support the ongoing work.

9.1.1. Remember that the craftsmen are the experts, and operations management is there to give non-technical advice.

9.1.2. Operations management should confer with each foreman to discuss what to put in the program. Remember that the RWP must be cost-effective. When cost versus maintenance is no longer practical, it may become cost-effective to replace the unit.

9.1.3. Manning will be an issue concerning RWP. The foreman will decide what is and is not critical. Once non-critical items have been identified, they are “permanently deferred”; the item has been identified as an item that should be done, but cannot be. The “Rec Type/Stat” block will be marked “H”.

9.2. RWP Summary Report. Operations management can use the RWP summary report to measure the shop’s RWP performance. This information is available from the “Summary” report in the RWP menu. The following gives a brief description of the columns within the summary report. **NOTE:** Be sure you change the week ending date to the week you desire or the report will produce the data from the previous week by default.

9.2.1. Total Items Due. This is the total number of items that were on the RWP schedule for the week ending. The remaining numbers should be equal to this number.

9.2.2. Number Scheduled: This is the number of items that were scheduled for the week ending. If these items were not completed, not charged, or not deferred, they will appear as overdue on the next week’s schedule.

9.2.3. Number Complete. This indicates the number of items completed by the end of that week.

9.2.4. Number Working. This indicates the number of items with time charged to them but not completed.

9.2.5. Number Overdue. This is the number of items that are overdue for the week ending.

9.2.6. Number Deferred. These are items deferred during the week ending date. **NOTE:** Items deferred will not be scheduled until the next date scheduled.

9.2.6.1. Defer Manhr. This indicates the number of items that were deferred due to lack of man-hours.

9.2.6.2. **Defer Access.** This indicates the number of items that were deferred due to the lack of access.

9.2.6.3. **Defer Matls.** This indicates the number of items that were deferred due to lack of materials.

9.2.6.4. **Defer Other.** This is the number of items that were deferred for reasons other than those listed.

9.3. Contingency RWP. RWP is just as important in the field as it is at the main base, but will most likely be smaller. An MAS may be written on a piece of paper or created in a word processor. IWIMS or ACES are not available under field conditions, so locally developed procedures will have to be used.

9.4. RWP Schedule. To run the RWP schedule, select the RWP menu from the IWIMS menu screen and press PF3.

9.4.1. The IWIMS RWP is designed to perform at certain intervals, with the required materials and man-hours associated with each task. The RWP establishes a schedule of actions due to be performed during the current and next week. This schedule is automatically maintained by the labor reporting process. Man-hours are identified and reserved at the shop level.

9.4.2. The shop is responsible for developing the MAS used to identify required tasks and hours as outlined in AFI 32-1001, paragraph 10; however, a working knowledge of the RWP program is encouraged.

Chapter 10

COLLECTION WORK ORDER NUMBERS (CWON)

10.1. Concept. The CWON system is a series of work order numbers that collect costs. DOD directives (DOD 7000.14-R, *DOD Financial Management Regulations*; DOD Instruction [DODI] 7040.4, *Military Construction, Authorization and Appropriation*; DODI 4150.7, *DOD Pest Management Program*; DOD Directive [DODD] 4001.1, *Installation Management*; DODD 4165.6, *Real Property Acquisition, Management, and Disposal*) require real property maintenance activities to collect hours and financial data, by account code, for all work completed. The CWON system minimizes administrative tasks required to accumulate labor hours and financial data for repetitive work completed by ATA shops. A CWON is also used to authorize certain repetitive type work charged to LUC 11 (entomology services, refuse collection, custodial services, and engineering and environmental planning) and LUC 19 (operations of utility plants). The CWON system helps to attain the following results:

- 10.1.1. Cost-effective property maintenance.
- 10.1.2. Maintenance of active and inactive real property.
- 10.1.3. Tracking work hours expended on maintenance and repair.
- 10.1.4. Maximize customer service.
- 10.1.5. Fast and simple system for minor work requirements.
- 10.1.6. Minimize customer paperwork.
- 10.1.7. Ensures timeliness of work requests.

10.2. Reserved CWONs. CWONs 00001 through 00020 are reserved for Air Force use as described in AFI 32-1001, Attachment 2.

10.3. Uses for CWONs. CWONs are used to collect charges for work authorized on AF Form 1219 or by DSW. The CWON list is used to authorize all work done by the Engineering Flight and Environmental Flight except:

- 10.3.1. Work on military construction projects for element of expense identification code (EEIC) 321- (greater than \$1.5 million, inside the continental United States [CONUS], and funded by Congress) and 331-funded (greater than \$1.5 million, outside CONUS, and funded by Congress) projects when the Air Force is the design agent.
- 10.3.2. Work on MFH projects when the design costs are reimbursable (cost account codes 71XXX [construction] and 72XXX [maintenance, repair, operations]).
- 10.3.3. Contract work done by architectural and engineering firms for the Air Force.
- 10.3.4. Work chargeable to utility operations, except contract work for utility services or purchased utilities.
- 10.3.5. Work chargeable to entomology, custodial, and refuse collection, except when done by contract.
- 10.3.6. Operations-type work, such as grass cutting, cleaning storm drains, and pavement cleaning.

10.4. CWON Collection. CWONs are also used to collect time, material, and other financial data for all work authorized by DSW and recurring work. They collect maintenance costs of individual utility plants and systems if required for computing utility sales rates.

10.5. CWON Validation. The CWON list is reviewed and validated annually by the chief of operations management and updated, modified, or deleted as necessary. A separate CWON is set up to collect costs for reimbursable work done by BCE on a repetitive basis for reimbursing activities, such as heating, ventilation, air conditioning (HVAC), the commissary, entomology services, sweeping MFH streets, or grounds maintenance in a hospital compound.

10.5.1. CWON List Setup.

10.5.1.1. Each year before 1 October, operations management and financial management will assign the CWONS.

10.5.1.2. Select all account codes that apply to the installation and list them in numerical sequence. Do not include account codes for ETA cost centers.

10.5.1.3. Select facilities within each account code that may require separate accounting. Assign a separate CWON to these facilities only if necessary to recover reimbursement for work.

10.5.1.4. Select reimbursement and refund services and customers, such as MFH, medical activities, and the depot maintenance activity group (DMAG). These require RRI codes and separate CWONS.

10.5.1.5. Select repetitive operations and recurring work such as operation of utility plants, refuse collection, and engineering and environmental planning, and assign a separate CWON to each.

10.5.1.6. Assign CWONS to the remaining account codes. A block of numbers (such as 00021 to 15000) should be reserved to simplify creation of the CWON list.

10.5.1.7. Identify the shops authorized to perform work in each of the above and ensure the shop is properly added to the CWON record.

10.5.2. CWON List Review. When the CWON list is complete, it will be reviewed by financial management and operations management to ensure separate CWONS are identified for each selected facility or service. Operations management will execute the add, delete, and change transactions to update the work order register and the shops. Financial management will update the account codes, cross-reference the files for add, delete, and change transactions, and verify the facility cost files.

10.6. Final Review and Distribution.

10.6.1. After all transactions are completed send the CWON to the chief of operations for the approving signature.

10.6.2. Upon approval, operations management will reproduce the listing and give one copy to:

10.6.2.1. Each scheduler.

10.6.2.2. Each shop superintendent or zone manager.

10.6.2.3. BCE logistics function.

10.6.2.4. Operations management.

10.6.2.5. Financial management.

Chapter 11

FACILITY MANAGER (FM) PROGRAM AND RESPONSIBILITIES

11.1. Purpose. The purpose of this chapter is to provide an overview of the FM program and the FM's responsibilities. For further guidance see AFPAM 32-1004, Volume 3, Chapter 2.3.

11.2. Unit Commander's Responsibilities.

11.2.1. The unit commander will designate in writing an officer, E-4 and above, or civilian equivalent, as primary and alternate FMs for each facility assigned to the organization. In multipurpose facilities, the major user should be assigned as the primary FM. Any other organization using a portion of a multipurpose facility is allowed to appoint an alternate FM for its area. Alternates can process actions with CE, but should coordinate with the primary FM.

11.2.2. The unit commander will ensure alterations, additions, or new construction is not done without BCE approval, or wing approval if required. BCE approves all work in real property facilities, regardless of the method used; therefore, work that will be done using an AF Form 9, International Merchant Purchase Authorization Card (IMPAC) purchase, or Simplified Acquisition of Base Engineer Requirements (SABER) will require BCE approval.

11.2.3. Unit commanders will ensure no change is made in the use of real property without the approval of the FUB.

11.2.4. Unit commanders must ensure real property and RPIE are not removed, relocated, altered, or otherwise changed without prior approval from the BCE.

11.2.5. Unit commanders will ensure vacated buildings are left in a clean undamaged condition (except for fair wear and tear), and adjacent grounds have been properly policed, until transferred back to the BCE.

11.3. FM's Responsibilities. The FM will:

11.3.1. Establish and publish rules for the opening, use, and closing of the building/facility during duty hours and for admittance or use during non-duty hours.

11.3.2. Ensure security measures are observed.

11.3.3. Establish procedures to ensure lights not in use are turned off and that heating or air conditioning temperature settings adhere to utility conservation standards.

11.3.4. Establish a daily policing and grounds inspection around the building/facility.

11.3.5. Ensure that users of real property facilities do not tamper with, replace, repair, or adjust RPIE, including electrical equipment, thermostats, heating and ventilating equipment, air conditioners, vents, blowers, fixtures, or other installed equipment. FMs will also ensure that real property and RPIE is not removed, altered, relocated, modified, or changed without BCE approval.

11.3.6. Establish procedures to immediately notify customer service when emergencies occur that involve the building or facility and its supporting utility systems.

11.3.7. Brief occupants/users of the building or facility on their collective responsibility for the care, custody, and protection of the property, including pecuniary liability for loss and damage in excess of fair wear and tear.

11.4. Minor Maintenance, Pest Control, and Housekeeping Duties. The FM should implement these duties on a routine basis. It is necessary to perform frequent checks to eradicate pests before they are able to do serious damage to government facilities.

11.4.1. Inspect janitorial service work daily or as frequently as service is provided, and report any unsatisfactory work to the quality assurance evaluator (QAE). A statement of work, frequency of cleaning, and area to be serviced will be given to each FM by the BCE.

11.4.2. Inspect assigned buildings or facilities and RPIE at least monthly. Check the overall condition of the property, as well as doors, windows, lights, plumbing, and HVAC equipment. Enter adverse conditions or items in need of routine repair or maintenance on AF Form 1219, and hold for the next facility walk-through with facility maintenance section personnel.

11.4.3. Multi-craft repair teams from the facility maintenance section will periodically inspect selected facilities for work requirements identified by the FM on an AF Form 1219. During the visit, the team will also perform periodic maintenance to the facility's electrical, HVAC, and fire detection or suppression systems if required.

11.4.4. FMs are expected to make minor repairs (e.g., plunge stopped-up sinks or toilets, repair small holes in drywall, glue loose wallpaper, change light bulbs). Lights above 3.7 meters (12 feet) will be changed by the BCE; lights lower than 3.7 meters are the responsibility of the FM. The FM is expected to keep the facility's equipment, appliances, and premises in the state of repair expected of any property owner.

11.4.5. Immediately report any damage to or loss of real property, including equipment. Assist with determining the cause of loss and assist in determining liability. When necessary, the FM will assist in preparing a statement of charges or a report of survey for damages to the building or facility and RPIE.

11.4.6. The FM is responsible for controlling the following pests: cockroaches, ants other than carpenter ants, centipedes, crickets, earwigs, firebrats, flies, silverfish, sow bugs, mice, and miscellaneous flying and crawling insects that do not destroy Air Force property. This responsibility also includes minor infestations of fire ants, wasps, and wasp nests.

11.4.7. Controlling insects that attack indoor plants, flowerbeds, and other ornamental plants that were not planted by the BCE or other base organizations is also the responsibility of the FM.

11.4.8. Pesticides and mice traps are available at the base self-help store or in the pest management section. The methods provided by self-help must be used for 30 days before the BCE will respond. The FM must be able to show that self-help methods were used. If no evidence is found that self-help measures were used, the BCE pest management section will ask the FM to first use self-help; the BCE will return in 30 days if the problem persists.

11.4.9. The pest management section will control pests that are significant health hazards, such as bees and ground-nesting wasps. Infestations that cause damage to Air Force property will also be controlled by CE, including termites, carpenter ants, and wood-boring beetles.

11.5. Space Utilization and Key Control. The FM will acknowledge receipts and responsibility for all keys to a building, including the redistribution of keys to other occupants or users as directed by the commander. The FM may request duplicated keys, re-keying, or lock changes as necessary on an AF Form 332. If a locksmith service is not available at the base, the AF 332 may be processed through CE for accomplishment by contract. Keys must be returned to the FM when the holders are reassigned or no longer employed.

11.5.1. Monitor the assigned space of a user organization to ensure its use is in compliance with the FUB's approval, and report any change in use, change of occupant, or vacant space to the real estate management office.

11.5.2. When a facility is vacated ensure that it is clean, orderly, and secured to prevent unauthorized entry. Tag all keys and return them to the CE real estate management office.

11.6. Grounds Maintenance. The FM will ensure the facility's grounds are maintained according to standards. Any discrepancies must be reported to operations management to write a DSW for accomplishment.

11.7. Custodial Services. Monitoring and or reporting custodial service requirements or discrepancies is the responsibility of the FM. Any discrepancies must be reported to the custodial QAE.

11.8. Digging Permits. Disturbance of earth deeper than 100 millimeters (4 inches) requires a digging permit (AF Form 103). This permit is initiated through the BCE's engineering assistants. If this requirement is ignored and damages are incurred, all costs for repairs will be charged to the responsible party.

11.9. Training Development. Operations management is responsible for the FM training program. Each Air Force installation should develop a comprehensive FM guide encompassing all aspects of CE operations and FM responsibilities.

11.10. Work Identification.

11.10.1. There are several methods that the FM can use to identify work to the BCE:

11.10.1.1. Call customer service if the work is an emergency or urgent.

11.10.1.2. Identify work on an AF Form 1219.

11.10.1.3. Submit an AF Form 332.

11.10.2. Emergency Work. A job is considered an emergency if there is an interruption of utilities, immediate danger to human life, or there is a possibility of damage to the facility's infrastructure. Anyone identifying an emergency can call CE customer service directly. The caller is responsible for briefing their FM. CE customer service or night service call will issue a DSW order number and a craftsman will respond within 24 hours.

11.10.3. Urgent Work. A job is considered urgent if there is a non-emergency condition, including, but not limited to, a stopped-up toilet when others are available, no heat in a single room, or air conditioning inoperative in a single room. The FM will make urgent requests and CE customer service will make the final determination as to whether or not the requirement is urgent. BCE will respond to urgent conditions within five duty days.

11.10.4. Routine Work. A DSW that is not an emergency or urgent is classified as routine. Routine job orders do not require detailed planning and can be sent to the shop as a DSW. Routine work has a 30-day commitment. Routine work may be requested on an AF Form 332, identified on an AF Form 1219, or by calling CE customer service.

11.10.5. The FM will maintain an AF Form 1219 to identify initial minor repairs of a non-emergency nature. Additional work will be identified on a walk-through inspection between the FM and an inspector from the facility maintenance section. After this inspection, the work will be scheduled for accomplishment.

11.11. Submitting a Work Request. An AF Form 332 is used to identify work that will require detailed planning, such as renovation, major repair work, new work, or replacement of real property such as heating systems, air conditioning systems, and ventilation systems. It is also used to identify paint requests, tree trimming, sign requests, and key requests.

11.11.1. The FM should submit a sketch, diagram, or map attached to the AF Form 332, that will speed the process of understanding the requester's needs. An original and three copies of AF Form 332 will be prepared. The customer will receive the customer copy, with a request number, after it has been submitted. For further guidance on processing an AF Form 332, see AFPAM 32-1004, Volume 3, Chapter 2.2.

11.11.2. The commander should sign any request for new work, facility modification, or minor construction; however, the FM may sign other requests. Anyone may request work on an AF Form 332, but it must be coordinated through the FM. The FM will coordinate in block 14 or sign the request in block 13. All AF Form 332s must be coordinated through the base safety, bioenvironmental, and environmental management organizations, and the base fire department. The requester or FM may hand-carry the AF Form 332 to each of these organizations or drop it off at CE customer service.

11.11.3. When CE customer service has received the AF Form 332, a number will be issued and the customer's copy will be returned to the requester. If the work does not require detailed planning, the request will be immediately scheduled with the appropriate shop. Work that will require detailed planning will be processed according to local base procedures (see AFPAM 32-1004, Volume 3, Chapter 2.2.)

11.12. Carpet Requests. Carpet installation requests must be submitted to the BCE using an AF Form 332 processed as outlined in paragraphs [11.11.](#) through [11.11.3.](#)

11.13. Fire Prevention and Inspections. The fire prevention program is set up and maintained to ensure fire safety in all buildings. This is done through education and training of all personnel assigned to base facilities. FMs have a broad range of responsibilities to fulfill to achieve these goals. The items listed in this section are intended to give a more comprehensive scope of the responsibility that comes with being designated an FM.

11.13.1. The FM is the point of contact (POC) for all fire-related issues within their facility; as such, they are required to accompany fire inspectors during all inspections. If this is not possible, then a qualified substitute must be appointed.

11.13.1.1. Correct any hazard or deficiency promptly. Hazards or deficiencies can be corrected on the spot or by submitting an AF Form 332 for self-help or BCE assistance.

11.13.1.2. When hazards and deficiencies are noted that cannot be corrected on the spot, an AF Form 1487, **Fire Prevention Visit Report**, should be issued. Note the suspense date and coordinate corrective action through the commander to get the AF Form 1487 returned on time. Your commander will be notified of any AF Form 1487 that does not meet the assigned suspense date.

11.13.2. Make weekly fire safety inspections, checking fire extinguishers, installed fire protection systems, emergency lights, exit lights, and housekeeping practices. Pay particular attention to the use of extension cords, restricted hallways or blocked exits, and storage of flammables. Power down electrical equipment if it will be unattended or not used for an extended period.

11.13.2.1. Outside housekeeping is often overlooked. Keep fire lanes and hydrants unobstructed and accessible; during the winter months this may also mean snow removal. Refer to the local operations plan (OPLAN) as it may limit smoking to authorized areas only.

11.13.2.2. Perform monthly inspections of fire extinguishers and document the results (e.g., tags on the extinguisher, notebook, electronic files). Keep a folder to track extinguisher inspections, work orders, visit reports (hood and duct cleaning and deep fat fryer thermostat calibration, where applicable), training, or other necessary documentation. Local base fire protection documentation is required reading for FMs and provides excellent guidance for walk-through inspections.

11.13.3. Train all personnel working in the facility on reporting fire procedures, the location and use of fire extinguishers and alarm pull-boxes, as well as emergency evacuation procedures. If there are any questions concerning fire safety, contact the base fire department.

11.13.3.1. Post emergency reporting numbers on all phones.

11.13.3.2. Conduct a walk-through at the close of business each day to ensure the work area is fire-safe. This task can be delegated to trained personnel who are on duty at closing time.

11.14. Bioenvironmental Engineering Services (BES).

11.14.1. OSHA's Hazard Communication (HAZCOM) Standard. HAZCOM was established to ensure workers are trained on the chemical hazards in their work environment. It consists of three elements that require action by supervisors: a written program, labeling of chemicals, and training.

11.14.1.1. Written Program. The written program includes establishing a 3-ring binder with Air Force Occupational Safety and Health (AFOSH) 161-21, *Hazard Communication Program*, and local operating procedures, the work area's listing of chemicals, material safety data sheets (MSDS) for each chemical, and operating instructions (OI) on non-routine tasks. These items must be maintained in the work area where the chemicals are used.

11.14.1.2. Labeling of Chemicals. Manufacturers must label their products to include the identity, hazard warnings, and name and address of the manufacturer. Secondary containers or containers with unreadable markings must be labeled.

11.14.1.3. Training. Training is required for supervisors and workers. Military public health (MPH) administers the initial HAZCOM training. Supervisors must conduct work-area-specific training at least annually, any time a new hazard is introduced into the work area, and when new workers begin employment. Training must be documented on AF Form 55, **Employee Safety and**

Health Record, or equivalent. Work area training must include the HAZCOM program, chemical hazard and control measures in the work area, and instruction on the use of an MSDS.

11.14.2. **Lead Paint and Asbestos.** Lead paint can be an ingestion and inhalation hazard and asbestos can be an inhalation hazard. If an employee notices paint or insulation material in poor repair or the employees cannot perform their work without disturbing the paint or materials, they must notify the BES function and complete an AF Form 457, **USAF Hazard Report**, and AF Form 332. BES is available to perform sampling and analysis to confirm the presence of lead or asbestos.

11.15. Environmental Management. With the increasing amount of environmental issues affecting human health and the environment, the Environmental Flight is the focal point for all environmental issues on base. Below is a general overview of what each section within the Environmental Flight may be responsible for, though all these sections may not exist at every base.

11.15.1. The environmental compliance section oversees environmental regulatory laws at the Federal, state, and local level while addressing overall environmental quality objectives and comparing environmental risk across programs. It also incorporates a planning element that is responsible for evaluating and assessing current and future operations, procedures, and processes as they relate to the National Environmental Policy Act (NEPA). The Air Force program that addresses NEPA is the Environmental Impact Analysis Program (EIAP). These processes function as a working group to review work orders, identify discrepancies, and develop plans to correct deficiencies. Training is provided to base employees and residents to enhance environmental awareness and increase knowledge and expertise.

11.15.2. The environmental restoration section administers the Installation Restoration Program. This element is responsible for identifying site that were environmentally contaminated from past practices and implementing proper remedial actions for restoring sites .

11.15.3. The natural and cultural resources section establishes, coordinates, and maintains the Natural Resources Management Program in compliance with local, state, and Federal agencies. This program encompasses the management of forests, horticulture, fish, wildlife, and landscaping activities. This element also integrates historical and archeological preservation requirements through extensive planning and management while encouraging rehabilitation and adaptive use of significant historical resources.

11.15.4. The pollution prevention section uses proactive measures to decrease hazardous material purchases and reduce hazardous waste and solid waste disposal through minimization and recycling. In an effort to achieve success in pollution prevention, the Hazardous Material Pharmacy (HAZMART) monitors and approves all hazardous material purchased on base or through local IMPAC purchases. Another pollution prevention initiative is an active recycling program.

11.16. Contract Services. Contract services are available at each base and for each facility but operation procedures may vary. The FM should contact the Maintenance Engineering Flight for further guidance.

11.16.1. **Custodial Contract Services.** Contact the Maintenance Engineering flight for information on services offered at your local installation.

11.16.2. **Grounds/Contract Maintenance Services (Grass Cutting/Snow Removal).** These services ensure grounds are maintained according to local base standards. Maintenance includes policing the area, ensuring sidewalks are kept clear and swept, and parking instructions are enforced. General

upkeep and cleanliness of the grounds surrounding the building, to include streets, is the FM's responsibility.

11.16.2.1. Snow removal contract work does not include all facilities, sidewalks, and parking lots. It is the FM's responsibility to have a shovel and ice-melt (available at the self-help center) to ensure immediate pathways are clear and not slippery. Contact CE customer service for snow removal information for your installation.

11.16.2.2. Grounds maintenance questions should be directed to CE customer service.

11.16.3. Asbestos/Lead Paint Contract Services. FMs must be aware of asbestos and lead health hazards if the facility has been identified as having these health hazards; concerns or questions should be directed to CE customer service or the Environmental Flight.

11.16.4. Paint Contract Services. Contact the Maintenance Engineering Flight for further guidance concerning the local procedures for paint contract services.

11.16.4.1. The FM must submit an AF Form 332 to CE customer service before performing self-help work that requires a purchase request or an IMPAC purchase. New work must be reviewed for clearance and evaluation of facilities for lead-based paint hazards in accordance with state and Federal Environmental Protection Agency (EPA) regulations.

11.16.4.2. No paint requirements will be accomplished until approval has been granted by the BCE.

11.16.5. Washer/Dryer Contract Services. Before calling the QAE for service, it is the FM's responsibility to check the circuit breakers to ensure they are not tripped, and that the appliance is plugged in, water is turned on (where applicable), and the inlet screens are clean on the washer hoses. Washer or dryer questions or calls should be directed to the QAE if the above steps have been taken and the problem could not be resolved.

11.16.6. Refuse Contract Services. The FM should contact the Maintenance Engineering Flight for information concerning refuse services.

Chapter 12

IWIMS REPORT UTILITY

12.1. Concept . IWIMS is used to track data from real property and base-level CE work orders, to logistics management and fire department information, and military construction projects, to environmental and readiness information. Functions covered in this pamphlet include the ability of IWIMS to initiate DSWs (paragraph 3.2.), assigning work request numbers (paragraph 4.7.2.), and running RWP schedules (paragraph 9.4.). The tool most often used to extract and organize this information is the IWIMS Report Utility. Visit the Air Force Civil Engineer Support Agency (AFCESA) Web site at

<http://www.afcesa.af.mil/directorate/ceo/management/operations/writing%20reports.doc> for step-by-step instructions on writing, modifying, and printing reports in IWIMS.

Chapter 13

VEHICLE CONTROL

13.1. VCO Designation.

13.1.1. The first step in establishing a vehicle control program to meet Air Force vehicle management goals is by the appointment of a vehicle control officer (VCO) and vehicle control noncommissioned officer (VCNCO). In accordance with AFI 24-301, *Vehicle Operations*, the unit commander or civilian equivalent is charged with the responsibility of appointing a primary and alternate VCO. The VCO is the commander's designated liaison with the Transportation Squadron. After the commander has selected the candidates, an appointment letter must be submitted to the Transportation Squadron's fleet management office ([Figure 13.1](#)). Upon receipt, the fleet management office will schedule the person for training. Appointed individuals should have a minimum retainability of one year.

13.1.2. A new VCO/VCNCO must be appointed no later than 30 days before the current individual's permanent change of station (PCS), retirement, or separation. The current VCO/VCNCO cannot be relieved of their duties until the new representative has been fully trained.

Figure 13.1. Sample Appointment Letter.

MEMORANDUM FOR XX TRNS/LGTO	
FROM: YOUR UNIT/CC	
SUBJECT: Appointment of Vehicle Control Personnel	
1. The following personnel are hereby assigned as Vehicle Control Officer and Vehicle Noncommissioned Officer.	
a. Vehicle Control Officer	
Name: _____ (Last, First, MI)	Rank: _____ Duty Phone: _____
Bldg #: _____	Address: _____ Office Symbol: _____
E-mail Address: _____	Home Phone: _____ <u>For emergencies only</u>
b. Vehicle Noncommissioned Officer	
Name: _____ (Last, First, MI)	Rank: _____ Duty Phone: _____
Bldg #: _____	Address: _____ Office Symbol: _____
E-mail Address: _____	Home Phone: _____ <u>For emergencies only</u>
3. Our squadron 3-digit fuel account code is:	
4. This letter supersedes previous letters on same subject.	
UNIT CC SIGNATURE	

13.2. VCO/VCNCO Duties. The VCO and VCNCO ensure proper vehicle management and care for the unit vehicle fleet. These duties are described in AFI 24-301.

13.3. Required Government Instructions. Listed below are the current instructions that will help you in your position as a VCO/VCNCO; they must be available for your use.

- 13.3.1. AFI 24-301, *Vehicle Operations*.
- 13.3.2. AFI 24-302, *Vehicle Maintenance Management*.
- 13.3.3. AFI 24-307, *Procedures for Vehicle Maintenance Management*.
- 13.3.4. AFMAN 24-306, *Manual for the Wheeled Vehicle Driver*.
- 13.3.5. Local base VCO handbook.
- 13.3.6. AFPAM 24-317, *Vehicle Control*.

13.4. Government Owned Vehicles (GOV).

13.4.1. Public Law. In accordance with AFI 24-301, Chapter 2, official use of GOVs is defined to restrict the use of all DOD motor vehicles, including those rented or leased, to official purposes only.

13.4.1.1. Providing a GOV solely or even principally to enhance the comfort or convenience of a member is not permitted.

13.4.1.2. Misuse and or failure to prevent misuse of government-owned or -leased vehicles are punishable under Title 31, United States Code (USC), *Money and Finance*, Section 1349. The unauthorized or willful misuse of a GOV may be cause for the following disciplinary actions:

13.4.1.2.1. Military personnel are subject to disciplinary action under provisions of the Uniform Code of Military Justice (UCMJ) or other administrative procedures.

13.4.1.2.2. Civilian personnel are subject to suspension from duty, without pay, for not less than one month, and will be suspended for a longer period or summarily removed from office if circumstances warrant.

13.4.2. Questions on Official Use of GOV.

13.4.2.1. When questions arise about official use of GOVs, they must be resolved in favor of strict compliance with statutory provisions and policies of the instructions. When guidance does not specifically fit a request for transportation support, commanders will use the following factors when making official-use determinations:

13.4.2.1.1. Is the purpose of the trip official?

13.4.2.1.2. Does the request have the potential to create a perception that will reflect unfavorably on the Air Force or cause criticism?

13.4.2.1.3. Will the request have an impact on mission requirements?

13.4.2.1.4. Is commercial or DOD-scheduled transportation available? It is important to note that the Air Force does not provide transportation support that competes with commercial services.

13.4.2.2. For more information on official use of GOVs and authorized uses see AFI 24-301, Chapter 2.

13.5. Permissible Operating Distance (POD). POD is a distance in a given direction to which an activity normally dispatches administrative-use vehicles. A distance of 75 miles one-way is considered the normal POD (see Department of Defense Directive [DODD] 4500.9, *Transportation and Traffic Management*). The Transportation Squadron will determine the POD for the base. Any unit needing to exceed the

POD must submit a request through the Transportation Squadron's chief dispatcher. Depending on the base's requirements, when unit vehicles are dispatched off the base the vehicle may need to be equipped with an emergency highway warning kit. This kit should contain the following: spare tire and wheel, jack, lug wrench, and road flares or reflectors. Additionally, when a request to exceed the POD is made, a trip packet should be requested from the Transportation Squadron.

13.6. Obtaining Unit Vehicles. Federal law controls the purchase of passenger-carrying vehicles for government use. Through the Appropriations Act, Congress sets statutory price limits for purchasing vehicles.

13.6.1. Tables of Allowance (TA) 019 through 033 prescribe the maximum allowances (not authorizations) to accomplish organizational and functional missions.

13.6.2. Requests for vehicle authorizations must be completed according to the Transportation Squadron's requirements. **Figure 13.2.** shows a sample of a vehicle justification letter. Each item must be addressed individually. Disregard items that do not apply to your requested vehicle (i.e., forklifts/tugs only). References to maintenance downtime or backup vehicles are not valid justifications for an authorization. When a basis of issue (BOI) covers multiple vehicle types, it means more than one vehicle type may be authorized for that BOI. Any technical data or other pertinent information required to substantiate the request should be included. The more information included, the better. Any justification not submitted according to the example will be returned.

Figure 13.2. Sample Vehicle Justification Letter.

(Official Letterhead) MEMORANDUM FOR XX TRNS/LGTO FROM: YOUR UNIT SUBJECT: Justification for Vehicle Authorization 1. Type vehicle requested: (Nomenclature as stated in T.O. 36A-1-1301.) 2. National stock number: (interchangeability and substitute [I&S] number from T.O. 36A-1-1301.) 3. Number requested: 4. Allowance source code: (As stated in applicable TA 019 through 033.) 5. Justification: List using activities, description of intended use, and explain why the specific vehicle is required. Cite directives, projects, or publications that drive this request. 6. Indicate vehicle usage: Number of trips, miles or hours, tonnage or amount of passengers, one shift or 24-hour requirement. 7. Forklift only: Amount of storage area, space supported, and estimated usage in 24-hour period. 8. Tugs/aircraft tow tractors only: State area of operation and estimated usage in 24-hour period. 9. Impact statement if request is disapproved. Do not use mission support as part of the justification. Mission essential may be used along with explanation. 10. Explain how the job/function/mission is currently being accomplished. 11. State the number of vehicles currently authorized/assigned. 12. If the request is to support a special project, the project name/number must be included along with the project completion date. The vehicle will be returned to the Transportation Squadron upon completion.

13.6.3. After justification is submitted to the Transportation Squadron, the fleet management office must be able to answer the following questions as part of an authorization analysis:

13.6.3.1. Is the vehicle type requested the most suitable to perform the task, or can a smaller, more fuel-efficient vehicle do the same job?

13.6.3.2. Can the requester be furnished with another source of transportation without using an additional authorization?

13.6.3.3. Is there a lower priority vehicle available to fill the requested authorization?

13.6.3.4. How has this requirement been supported in the past, and why can't the present support continue?

13.6.3.5. How are presently assigned vehicles used?

13.6.3.6. Can this requirement be satisfied within the organization or with another organization?

13.6.3.7. Is the requirement seasonal or sporadic? Can it be satisfied by a short-term lease or rental to avoid investing in a new vehicle?

13.6.4. Other questions the fleet management office must be able to answer in the affirmative before forwarding the request to Headquarters Air Force Special Operations Command, Vehicle Management (HQ AFSOC/LGTV) are as follows:

13.6.4.1. Does the justification indicate the current vehicle authorization listing using activity or the proposed user?

13.6.4.2. Does the justification cite the directive, project, or publication that generated the request, if appropriate?

13.6.4.3. Does the justification fully explain the proposed use of the vehicle?

13.6.4.4. Does the justification identify expected utilization information (miles, hours, passengers, equipment, supplies, materials, and number of trips)?

13.6.4.5. Does the justification list the number of vehicles currently authorized and assigned to the requesting unit and justify why co-utilization will not meet mission requirements?

13.6.4.6. Does the request justify why transportation support from the Vehicle Operations Flight cannot satisfy the requirement?

13.6.4.7. Does the justification include a mission impact statement of the organization, base, or wing if the request is denied?

13.6.4.8. Does the justification cite any actions taken to realign other unit authorizations to accommodate the requirement?

13.6.5. After the analysis is complete, the Transportation Squadron will make a recommendation and forward the request to the Logistics Group (LG) commander through the Transportation Squadron commander. The LG will then approve or disapprove the request based on the justification and analysis. If approved, it will then be forwarded to MAJCOM headquarters for final approval or disapproval. If approved, the authorization will be filled at the earliest possible time. Sometimes substitute vehicle types will be assigned to assist the unit in meeting mission requirements. Keep in mind that the type of vehicle authorized is the type that will be assigned when assets are available.

13.7. Authorized Realignment. Periodically, reviews are conducted for possible authorization realignments or reductions. Units must be prepared to defend their needs if the requirement is still valid.

13.8. Accounting for Unit Vehicles. Periodically, the fleet management office will send the VCO/VNCO two computer-generated master vehicle listing/hand receipts. The VCO will need to ensure the vehicles listed are the vehicles assigned to the unit. If any discrepancies are found, make corrections and

contact the vehicle operator to resolve any errors. If everything is in order, sign both copies, put one in the VCO files and send the other to the fleet management office to be filed in their records.

13.9. Vehicle Priority-Buy. The fleet management office is responsible for submitting the annual vehicle priority-buy. The submission will identify shortages and vehicles eligible for replacement for host base vehicles and for all tenant units. The priority-buy is based on vehicle requirements two years in advance, allowing time for funding by Congress. After the fleet management office compiles the data and prepares the priority-buy package, it is sent to the MAJCOM headquarters for the tenant unit's command. The MAJCOM will compile this information and forward it to the Warner Robins Air Logistics Center (WR-ALC). There the data will be compiled and forwarded to Headquarters, United States Air Force (HQ USAF) as the recommendation for that fiscal year's purchase requirements. HQ USAF allocates funds to WR-ALC to purchase vehicles and distribute them to the MAJCOMs, which in turn distribute them to their bases.

13.9.1. Short-term Lease. Transportation Squadron commanders may rent or lease vehicles to meet peak work loads and unusual or emergency requirements for periods not to exceed one year without established authorizations (if the user has funds available). When a rental or lease will exceed 60 days, General Service Administration (GSA) vehicles must be used if they are available. The fleet management office will confirm non-availability from GSA before executing a commercial lease exceeding 60 days for general-purpose vehicles. Lease time frames are subject to local base policies.

13.9.2. Long-term Lease. Leasing over one year is generally to fill valid authorizations when no GOV is available. The fleet management office will obtain a non-availability letter from GSA for commercial design, general-purpose vehicles and include this statement with the request when it is sent to MAJCOM HQ and WR-ALC Vehicle Maintenance Directorate, Item Management Division (LVD) for approval. Lease requests for other than commercial design vehicles are sent to the MAJCOM Director of Transportation (HQ/LGT) for approval. Written approval must be obtained to extend leases past the approval period. Justifications include:

13.9.2.1. Current authorizations and assets by type to be leased.

13.9.2.2. Number of vehicles on hand that exceed Air Force standards for age and mileage.

13.9.2.3. Model year, mileage, and estimated repair cost of the vehicle to be replaced.

13.9.2.4. Other types of excess vehicles on-hand that are suitable for substitution.

13.9.2.5. Whether the vehicles are required to fill open authorizations or required to replace existing inventories.

13.9.2.6. Impact or course of action if authority to lease is not granted.

13.9.2.7. Whether the request is a new or renewal lease.

13.9.2.8. Monthly and annual cost for the lease, including the basic cost, mileage charges, and fuel and maintenance costs.

13.9.2.9. Anticipated period of use.

13.9.3. Validation. The fleet management office will validate all rentals and leases for installation activities. For more information on vehicle rentals and leases see AFI 24-301, Chapter 5.

13.10. Abuse and Misuse. VCOs are responsible to the commander for preventing, reporting, and investigating vehicle abuse and misuse within the unit. In accordance with AFMAN 24-307, local procedures are established and must be fully supported by all commanders to be effective.

13.10.1. Vehicle abuse is any mechanical failure or damage that is not the result of fair wear and tear or defective materials or workmanship. The using organization will investigate all damage not applicable to fair wear and tear in accordance with AFMAN 23-220, *Reports of Survey for Air Force Property*. Vehicle maintenance will notify the commander and VCO of the unit involved, along with the base legal, finance, and safety offices (usually by a form letter of abuse to a GOV). Vehicle maintenance will make the repair unless notified by the using organization after a predetermined period of time. Some examples of vehicle abuse are:

- 13.10.1.1. Tampering with governors.
- 13.10.1.2. Running engines at excessive speeds.
- 13.10.1.3. Operating a vehicle with insufficient oil or coolant.
- 13.10.1.4. Using a vehicle for other than its designed or intended purpose.
- 13.10.1.5. Starting and or stopping too fast when not in an emergency.
- 13.10.1.6. Not washing or waxing the vehicle.

13.10.2. Misuse is any unauthorized use of a GOV. A GOV must be used for official purposes only. The VOO can give guidance in specific cases where the official nature of the vehicle use is in question. See paragraph **13.4.2.** for details on legitimate GOV usage. A witness to suspected vehicle misuse should contact the fleet management office. The fleet management office will need the following information to investigate the incident:

- 13.10.2.1. Registration number of the vehicle.
- 13.10.2.2. Date, time, location, and details of the incident.
- 13.10.2.3. POC and duty phone number for any additional questions.

13.11. Accident Reporting and Investigating Procedures. All accidents that involve GOVs must be reported on SF 91. If the GOV is involved in an accident, the Security Forces Squadron must be contacted. More procedures can be found in AFMAN 24-306, Chapter 10. It is recommended that accident-reporting procedures be written on a card and placed with the accident cards in the vehicle and the unit briefed on its location. When a GOV is involved in an accident, the VCO is responsible to report, document, investigate, and take appropriate actions necessary to prevent reoccurrence within the organization. Information on investigating accidents can be found in AFI 31-201, *Security Police Standards and Procedures*, and AFI 91-204, *Safety Investigations and Reports*. It is recommended that a case file be established for each GOV accident, abuse, or misuse case occurring within the unit. The Transportation Squadron's Vehicle Operations Flight can provide guidance on vehicle accident reporting. **NOTE:** The SF 91 and DD Form 518, **Accident Identification Card**, must be in the vehicle at all times during operation. The purpose of the DD Form 518 is to provide persons involved in an accident with a DOD-owned or -leased vehicle the identity of the person with the authority to act on the matter.

13.11.1. The following should be placed in the accident investigation file:

- 13.11.1.1. Completed SF 91.

- 13.11.1.2. Vehicle maintenance work order.
- 13.11.1.3. Vehicle release letter (**Figure 13.3**).
- 13.11.1.4. Police report.
- 13.11.1.5. Photos of accident damage or abuse.
- 13.11.1.6. VCO investigation letter of accident or abuse.
- 13.11.1.7. AF Form 20, **Repair Cost and Reparable Value Statement**.
- 13.11.1.8. Finalized copy of any one of these three reports, if applicable:
 - 13.11.1.8.1. AF Form 198, **Report of Survey for Air Force Property**.
 - 13.11.1.8.2. DD Form 362, **Statement of Charges for Government Property Lost, Damaged, or Destroyed**.
 - 13.11.1.8.3. DD Form 1131, **Cash Collection Voucher**.

13.11.2. If a vehicle is involved in an accident, it must be turned in to vehicle maintenance immediately. If the accident occurs after duty hours or on a weekend or holiday, then the vehicle must be turned in the next duty day following the accident. This applies even if the vehicle was not damaged. Failing to turn a vehicle into vehicle maintenance after an accident can result in vehicle abuse action. Vehicle maintenance will determine what is considered vehicle abuse.

13.11.3. The VCO/VCNCO will release the accident vehicle for repair when the vehicle investigation is complete. Vehicle maintenance will make the repairs when the release letter is received. **Figure 13.3** is an example of a release letter. More information on accident causes and reports can be found in AFMAN 24-306, Chapter 10.

Figure 13.3. Sample Release Letter.

MEMORANDUM FOR XX TRNS/LGTM
FROM: YOUR UNIT
SUBJECT: Vehicle Repair Release
1. Vehicle 98B1234 is no longer needed for the investigation of (Abuse/Accident) and is hereby released for repair.
2. POC and duty phone.
VCO/VCNCO Signature Block

13.12. Contingency Support.

13.12.1. Annually, the VCO is tasked to provide the fleet management office with the unit's minimum essential level (MEL) for vehicles (**Figure 13.4.**). The VOO, superintendent, and vehicle maintenance officer/superintendent will review VCO inputs and make their recommendations for the MEL. If their recommendations differ from the VCO's, the VCO will be asked to re-justify the inputs.

13.12.2. The MEL will enable the VOO to recall lower priority vehicles from units above their MEL to satisfy organizational shortages in another unit when the number of vehicles falls below their MEL. Revisions to the MEL will be considered throughout the year when necessary to reflect changes in the unit's mission or fleet.

Figure 13.4. Sample MEL List.

MINIMUM ESSENTIAL/PRIORITY RECALL LIST							
VEH RECALL TYPE	MGT REMARKS CODE	PRI SEQ	ORG	UNIT	AUTH	ASSGN	MEL
SDN CMPT	B102		TD	AGOS	1	1	1
0 GSA							
SDN CMPT	B102	4	4B	SFS	1	1	
0							
SDN CMPT	B102	8	0A	TRNS	9	9	7
4 4 GSA's SOW/CC/CV SPTG/CC							
SDN CMPT	B102		TD	AGOS	1	1	1
0							
	B102 TOTAL				12	12	
10 2							
CONTINUES THRU EACH VEHICLE TYPE.							

13.13. Vehicle Priority Recall List. The vehicle priority recall list is a management tool used to determine the order in which unit vehicles should be recalled. The list is developed from the data in the MEL and is used by the Vehicle Operations Flight to replace higher priority vehicles that require extended maintenance and support emergency operation plans. This information depends on the base recall plan. When notified of a recall, ensure that vehicles are brought to the fleet management office. Vehicles must be cleaned, full of fuel, and free of any open discrepancies noted on AF Form 1800, **Operator's Inspection Guide and Trouble Report (General Purpose Vehicles)**. The unit VCO must respond within one hour to recall requirements.

13.14. Deploying Unit Vehicles. When a unit is notified of a pending temporary duty (TDY) assignment, the VCO/VCNCO will notify the fleet management office of the following information to allow vehicle maintenance to track the vehicle:

- 13.14.1. Tasking authority for the deployment.
- 13.14.2. Type of vehicle to deploy and registration number.
- 13.14.3. Date due to depart.
- 13.14.4. Date due to return.
- 13.14.5. Location (unless classified).

13.15. Transportation Support Services. The Vehicle Operations Flight's vehicle dispatch section is a service organization with an array of support services that can assist the unit in meeting mission requirements. Listed below are some of the services available that the Transportation Squadron may provide as a service to the unit.

13.15.1. Military taxi service is provided as a quick-response, point-to-point service to all requesters requiring official transportation. To reach this goal, taxis cannot be dispatched to one user for an extended period of time. The maximum waiting time at each destination is five minutes unless approved by the dispatcher. If a user requires additional time, it may be necessary to call for another taxi or explain the circumstances to the dispatcher at the time of request.

13.15.2. The Vehicle Operations Flight has a limited number of general-purpose vehicles assigned for the support of base operations. U-Drive-It (UDI) vehicles are available on a first-come, first-served basis. The request should be submitted at the earliest possible time to better ensure that support can be provided. If the requirement will be for more than 24 hours, a written request must be submitted to the chief dispatcher.

13.15.3. Wrecker service is provided by the Vehicle Operations Flight during normal duty hours when requested by vehicle maintenance. During normal duty hours an operator must accompany the vehicle to vehicle maintenance to expedite entry into the repair system. Wrecker service after normal duty hours may be obtained by contacting the Vehicle Operations Flight's dispatch section. Any request after normal duty hours will be limited to emergencies only (i.e., vehicles blocking traffic on or off the flight line creating a hazard, and off-base disabled vehicles). The wrecker operator will transport the disabled vehicle to the vehicle maintenance compound. The unit VCO must have someone report to vehicle maintenance on the following duty day to formally turn the vehicle in for maintenance (see paragraph [13.18](#)).

13.16. Unique Transportation Support. For unique transportation support (i.e., distinguished visitor [DV], Inspector General [IG], TDY support), a standard request letter stating who, what, when, where, and how long is required to initiate vehicle support ([Figure 13.5](#)). This letter should be forwarded to the chief dispatcher as soon as possible to ensure appropriate transportation support.

Figure 13.5. Sample Vehicle Request Letter.

MEMORANDUM FOR XX TRNS/LGTO
DATE
FROM: YOUR UNIT
SUBJECT: Vehicle Transportation Support
1. Request one sedan to support Col John Doe from 20 Feb 03 to 25 Feb 03.
2. Justification:
VCO Signature Block

13.17. GOV Licensing and Training.

13.17.1. Operator Records and Licensing (ORL). ORL is responsible for licensing all military, civilian, and contractor personnel operating GOVs, and maintaining operator licensing records and training documentation. Military and civilian personnel who possess a valid motor vehicle license issued in any of the 50 states, the District of Columbia, Puerto Rico, or similar licensing jurisdiction can apply for a license to operate GOVs. **NOTE:** Everyone who operates a GOV must be entered in the licensing computer at ORL. For questions on the licensing of others, refer to AFI 24-301, Chapter 4.

13.17.2. Vehicle Operator Training.

13.17.2.1. Each organization conducts all required vehicle training for its personnel. A list of qualified instructors by vehicle type is designated by the VCO as instructors for the unit. This must be updated annually by request on official letterhead (**Figure 13.6.**). The VCO will forward the trainers' list to the fleet management office, which will request a background check conducted by the Security Forces Squadron. Based on the check, the VOO/VOM will approve or disapprove the request.

Figure 13.6. Sample Vehicle Trainer Designation Request Letter.

MEMORANDUM FOR	
DATE	
FROM: YOUR UNIT	
SUBJECT: Designation of Vehicle Trainers	
1. Request the following individual(s) be designated as vehicle trainer(s) for (your unit).	
LAST NAME	GRADE
SSAN	DUTY PHONE
2. I certify the above individual(s) is qualified to instruct and supervise student operators. Listed below by vehicle type and management codes are vehicles on which this individual(s) will train and qualify our vehicle operators.	
MGT CODE	VEHICLE TYPE
L350	TRK ACFT TWG MB2
VCO Signature Block	

13.17.2.2. Personnel undergoing initial or specialized training are considered student operators and possess an AF Form 171, **Request for Driver's Training and Addition to U.S. Government Drivers License**. The AF Form 171 serves as a learner's permit until certified by an instructor. After a student operator shows competency in operating the vehicle and certified by an instructor, the unit commander or VCO/VCNCO validates the successful training by signing the form. ORL will use the form as a source document to initiate or update an operator's record.

13.17.3. Vehicle Operator's Information. AF Form 2296, **Vehicle Operator's Information**, is established and maintained for each vehicle operator issued an AF Form 2293, **U.S. Air Force Motor Vehicle Operator Identification Card**. It provides information on official qualifications, background, and experience. AF Form 2296 is a permanent record and is forwarded to the new duty station each time a member transfers.

13.17.4. Motor Vehicle Operator Identification Card. When an individual meets licensing requirements in accordance with AFI 24-301, Chapter 4, an AF Form 2293 is prepared for the approval of the VOO/VOM (or personnel designated as authentication officials). The AF Form 2293 is the actual license carried by the operator and is valid indefinitely, unless suspended or revoked.

13.17.5. TDY Personnel. Personnel in TDY status may operate Air Force vehicles when on official orders and when in possession of a valid state and military license for the vehicle to be operated.

13.17.6. Members Separating. Members separating from the service may keep their license if they bring it to ORL to be over-stamped, "NOT VALID - SEPARATED FROM THE SERVICE." When transferring to another military station, the ORL office at the gaining base must validate the government operator's permit before allowing the member to operate a GOV at that installation. For information concerning licensing of Federal civilian personnel, contractors, duplicate licensing, suspension, or revocation of driving privileges, restoration of driving privileges, and reexamining an operator, see AFI 24-301, Chapter 4.

13.18. Maintenance.

13.18.1. Maintenance on Non-Air Force Procured Vehicles. All requests to locally purchase equipment for which vehicle maintenance has a primary or assistant maintenance responsibility are sent through the vehicle maintenance manager (VMM) or vehicle maintenance superintendent (VMS). Coordination should be accomplished before purchasing the equipment to ensure maintenance can be performed and parts are obtainable. The VMM or VMS will refuse maintenance responsibility for equipment if the request to purchase the equipment was not properly routed through vehicle maintenance for coordination and without the necessary technical data. Organizations procuring non-registered equipment will coordinate with the VMM or VMS to make sure parts, facilities, manpower, and funds are available for support before it is required. Organizations should consider purchasing a maintenance agreement to support the equipment.

13.18.2. Turn-in Procedures.

13.18.2.1. When turning in a vehicle to the shop for scheduled or unscheduled maintenance, ensure the following:

13.18.2.1.1. The AF Form 1800 for the vehicle is completely and properly filled out.

13.18.2.1.2. The vehicle is clean inside and out, and waxed if needed.

13.18.2.1.3. The vehicle has at least three-fourths of a tank of fuel, unless the vehicle's problem is fuel-related.

13.18.2.1.4. The individual turning the vehicle in for maintenance is knowledgeable of the vehicle's problem.

13.18.2.2. Contact your local vehicle maintenance shop for vehicle turn-in hours.

13.18.2.3. Contact vehicle maintenance for mobile maintenance calls.

13.18.2.4. Vehicles requiring minor repairs should be driven to vehicle maintenance as soon as possible. Examples of items considered to be minor maintenance are wiper blades, vehicle lighting, tire repairs, and engine belts. If there are any questions concerning vehicle safety or repair requirements, the Vehicle Operations Flight should be contacted.

13.18.2.5. Only VCO/VCNCOs should call vehicle maintenance to request the status of vehicles in maintenance.

13.18.2.6. It is imperative that repaired vehicles be picked up in a timely manner. This is especially true during exercise and contingency operations. During these times, vehicles provide a prime target for enemy or terrorist actions. When your unit is notified that a vehicle is ready, all efforts must be made to have the vehicle picked up as quickly as possible.

13.18.3. Vehicle Modification/Addition. In accordance with AFMAN 24-307, a vehicle modification is a major change to the configuration of a vehicle, and a vehicle addition is the adding of special equipment and commercial optional parts or accessories to meet certain operational needs but does not change the original purpose of the vehicle (e.g., camper shells, bed liners, radios, bins/shelving, lift gates, pintle hooks, extra lights). Organizations must submit a written request to vehicle maintenance for all modifications/additions. Unit operations and maintenance (O&M) funds will be used for initial and replacement items for installation. If vehicle maintenance cannot install the required items, the organization must also budget for commercial installation. Organizations that request to install their own equipment must have the vehicles inspected by vehicle maintenance after installation to ensure safe and serviceable operation. See [Figure 13.7](#) for a sample modification/addition letter.

Figure 13.7. Sample Vehicle Modification/Addition Letter.

<p>MEMORANDUM FOR</p> <p>FROM: YOUR UNIT</p> <p>SUBJECT: Request for Vehicle Modification/Installation of Added Equipment</p> <p>1. Request authorization to install a pintle hook assembly on our vehicle, 98B1234. Installation of pintle hook will allow for the towing of trailer-mounted welding unit that weighs 1800 lbs.</p> <p>2. Unit will purchase the pintle hook and all materials needed for the installation. Funds will also be provided to restore the vehicle to original condition if vehicle is rotated to another squadron.</p> <p>3. POC and duty phone.</p> <p>VCO Signature Block</p>

13.18.4. Deploying Unit Vehicles. All vehicles going TDY for 30 days or more and all vehicles being processed through the cargo deployment function must be turned into vehicle maintenance for a limited technical inspection (LTI). To ensure the vehicle is safe and serviceable and that all scheduled maintenance is accomplished before it leaves the base. These vehicles are also required to have an

incoming LTI upon return from the deployment or TDY so that any damage may be charged to the fund cite of the deployment.

13.18.5. Scheduled Maintenance Policy.

13.18.5.1. A computer-generated appointment letter is provided to the unit VCO/VCNCO when vehicles are due for scheduled maintenance (e.g., annual inspections, oil changes). Every effort will be made to provide these letters three to four weeks before the actual appointment date.

13.18.5.2. Vehicles must be processed into the vehicle maintenance customer service center (CSC) on the date and time of the scheduled appointment. Vehicles projected for TDY during this appointment are turned in before departing. Others may be brought in earlier to meet mission requirements. Maintenance control will work with units on a case-by-case basis to resolve scheduling conflicts.

13.18.6. Vehicle Repair Waivers. Repairs for mechanical discrepancies that are not cost-effective to repair immediately, will not cause further damage to the vehicle, and are not safety items may be waived.

13.18.7. Standby Mechanic. During other than normal duty hours, the vehicle dispatch office will receive requests for emergency roadside repairs. The dispatcher will ensure the using organization is requesting mission-essential or emergency vehicle repairs and is below their MEL for this specific vehicle, or the vehicle is critical to real-world requirements. Additionally, the dispatcher will ensure a replacement vehicle is not available within the using organization or through vehicle dispatch. After verifying all criteria and determining that the vehicle is needed for mission accomplishment and no substitute is available, the dispatcher will then contact the standby maintenance technician.

Chapter 14

COMMAND AND CONTROL

14.1. Concept. Command and control enables personnel to assemble information into a coherent whole, allowing commanders to make sound decisions and effectively use available resources. The term “command” is defined as the act of giving orders or an authoritative direction. Command seeks mission accomplishment and leadership is the primary means to achieve the desired results. The term “control” is defined as exercising authority to regulate, direct, or influence, and includes sound resource management. Together, command and control culminate in a harmonious relationship that drives the mission.

14.2. Wing Operations Center (WOC). The WOC is primarily concerned with continuing flying operations or the base mission, and the general condition and operations of the base facilities. Typical staffing within the WOC consists of the wing commander and representatives from the aircraft operations, aircraft maintenance, logistics support, intelligence, and weather functions. Other personnel may be added as the situation dictates. The WOC decides on recovery operation priorities based on input from the Survival Recovery Center (SRC).

14.3. Survival Recovery Center (SRC). The SRC is established specifically to direct all base operability, survivability, and recovery operations. The SRC is typically located with or near the WOC battle staff area to allow close coordination of the recovery effort. In the SRC, the combat support group commander and staff form the nerve center for base recovery as they receive, analyze, prioritize, display, and report information on the status of the base. The SRC reports their findings to the WOC for confirmation, whereupon the SRC disseminates the information to the Damage Control Center (DCC) and other command elements. Several control centers support the SRC.

14.4. Damage Control Center (DCC). The DCC is the SRC hub where civil engineering strategies and priorities are determined; a vital civil engineering function in wartime and peacetime. The effective setup and operation of the DCC enhances CE’s ability to assess, equip, repair, and maintain Air Force bases (OCONUS or CONUS) during natural disasters, manmade disasters, accidents, and war. The DCC monitors and coordinates civil engineer recovery action, damage assessment, decontamination, damage recovery, and repair as directed by the SRC. The DCC also maintains a service call function to respond to emergency requirements. It is imperative that the DCC is operative for CE to take the lead in emergency response planning before and after disasters or attacks.

14.5. DCC Responsibilities.

14.5.1. DCC assumes responsibility to record all events log items and notify appropriate personnel.

14.5.2. DCC consults the electrical superintendent to obtain a current generator status and aircraft arresting system list.

14.5.3. DCC maintains the status of vehicles and their location by retrieving vehicle information from the VCNC. The DCC controls reallocation of vehicles among recovery teams.

14.5.4. DCC obtains the status of fuel storage and dispensing from the mechanical superintendent.

14.5.5. Obtain from the noncommissioned officer in charge (NCOIC) of material control the status of all general supplies, such as lumber, piping, sheet metal, and cement.

- 14.5.6. Any reports on limiting factors (LIMFAC) will be sent to the SRC.
- 14.5.7. DCC relays information to Air Base Emergency Repairs Operations (ABERO), Rapid Runway Repair (RRR), Damage Assessment Team (DAT), and SRC members.
- 14.5.8. The officer in charge (OIC) collects the following:
 - 14.5.8.1. Utility maps.
 - 14.5.8.2. Disaster Preparedness Operations Plan (OPLAN) 32-1.
 - 14.5.8.3. AFI 10-211, *Civil Engineer Contingency Response Planning*.
 - 14.5.8.4. Prime BEEF Implementation Guide (if required).
 - 14.5.8.5. Tracking charts and logs.
- 14.5.9. If necessary, the damage control officer will direct the establishment of a two-shift operation for the recovery force.
- 14.5.10. The DCC will keep the SRC informed of damage. Information will be provided for the submittal of Operations Report (OPREP) 3, Operations Event/Incident Reports.
- 14.5.11. Notify SRC where displaced personnel are to be placed due to extensive facility damage.
- 14.5.12. Off-base contractor assistance can be obtained through the contracting officer to repair damage beyond the ability of CE to repair.

14.6. DCC Reports. At any given time during a contingency operation, reports will have to be made from available information. Reports may be handwritten, printed, typed, or given verbally. Once damage is assessed it must be immediately recorded, plotted, and a Damage Assessment and Repair Team (DART) must be assigned according to priorities. Facilities and utilities priorities are normally listed in AFI 10-211; if this is not available at your location you must generate your own facility and utility priority list. The following are reports that may have to be generated:

- 14.6.1. Damage assessment reports.
- 14.6.2. Higher headquarters reports (normally by the command post, but will require CE input for damage assessment activities).
- 14.6.3. OPREP-3 report on the extent of damage to utilities, housing, and facilities.
- 14.6.4. CE personnel reports.
- 14.6.5. Tempest Rapid (employment of military resources in natural disaster emergencies).
- 14.6.6. Commander's situation report (SITREP) and follow-on report to OPREP-3.
- 14.6.7. Bulk petroleum contingency report (reporting emergency petroleum, oil, and lubricants [REPOL]).
- 14.6.8. Contract repair documentation.
- 14.6.9. Vehicle and generator status reports.

14.7. Establishing the DCC. The Support Group commander, BCE, or the Operations Flight commander will activate the DCC. The DCC is managed by the chief of operations and predominately staffed

by senior personnel from various elements of the Operations Flight. Engineering and operations personnel are part of the staff acting as damage plotters, status keepers, schedulers, resource personnel, and coordinators. Typically, operations management is responsible for setting up and supervising the DCC operation. The DCC has a predetermined location with adequate communications and working space. The area should be large enough to hold the DCC staff, have space for charts and maps, and allow room for communication flow from the DCC teams.

14.7.1. Planning is the key to prepare for contingencies. Plans are required to be on file and ready to use at a moment's notice. The following are minimum requirements and each different location may have a different plan, due to geographical location, mission, or other reasons. These plans should be in the DCC in wartime or peacetime. If deployed to a bare base, some of these plans, even though written for a certain base, could be useful for the checklists that they contain. You may also want to have some field guides in the DCC, such as the AFPAM 10-219 series (contingency operations) and the Air Force Handbook (AFH) 10-222 series (bare bases). When the DCC is relocated, take this reference material if possible.

14.7.1.1. AFI 10-211.

14.7.1.2. OPLAN 32-1.

14.7.1.3. Snow plans (if required).

14.7.1.4. Standard base checklist or OIs.

14.7.1.5. Vehicle dispersal plan.

14.7.1.6. Camouflage, conceal, and deception (CCD) plan.

14.7.2. Radios are the most frequently used means of communications during contingencies. DCC personnel and contingency teams should be trained to use radio communication properly. There is typically a base station and a set of hand-held radios. Some units may have Scope Shield radios in the mobility package. If your unit does have this type you should become familiar with their use. Radios come in many different styles and all are assigned a frequency from base communications. Factors that affect the range of radio equipment are weather, terrain, antenna, power, and the location of the unit itself. Interference in the form of static often occurs when you use radios near power lines, generators, other radio stations, bad weather, or enemy jamming.

14.7.2.1. Communications security (COMSEC) denies or delays unauthorized personnel from gaining information of value from telecommunications.

14.7.2.1.1. Use authentication tables to ensure the other communications station is a friendly one.

14.7.2.1.2. Use only approved codes to send information.

14.7.2.1.3. Designate periods when all radio equipment is to be turned off.

14.7.2.1.4. Restrict the use of radio transmitters (monitoring radio receivers/listening silence).

14.7.2.1.5. Enforce net discipline and radio procedures.

14.7.2.1.6. Use proper site selection, minimum power, and minimum transmission time.

14.7.2.1.7. Use directional antennas when possible.

14.7.2.2. Because of recent enhanced radio jamming development, more emphasis is placed on visual communications for command and control. Visual signals include arm and hand signals, pyrotechnics, smoke, flashing lights, and panel markers. The effectiveness of any signal will depend upon a set of prearranged meanings.

14.7.2.3. Sound signals, like visual signals, depend upon prearranged meanings. Sound signals include the use of the voice, whistles, horns, weapons, and other-noise making devices to transmit simple messages over short distances. Their best application is as a command post warning alarm.

14.7.2.4. Wire communications are not often used during a work party undertaking; however, it does have an application with other Prime BEEF activities such as beddown. Installing a wire network is time-consuming, but it is more secure than radios. Radios are subject to damage from vehicular traffic and enemy offensive action.

14.7.2.5. Messengers are a means of transmitting large and bulky items such as maps and documents, as well as oral and written correspondence. This pertains to personnel who are assigned to delivering documents to and from the sender.

14.7.2.6. Whatever types of communications are used, always have a backup system. The following is a simple checklist for communication failure. There should be steps in place to cover the communication failure.

14.7.2.6.1. Assemble and brief runners to act as a backup communication system.

14.7.2.6.2. Alert the electrical response team to stand by if required.

14.7.2.6.3. Notify base communications personnel, by runner, of communication failure.

14.7.2.6.4. Use the fire/crash truck public address system if needed and if available.

14.7.2.6.5. Use visual communication if available.

14.7.3. Display boards should be easy to read and maintain. As information is gathered this data should be displayed, plotted, and or recorded. Display boards come in many styles and shapes and are kept updated as the information becomes available. Some display boards can be made and stored or displayed during non-contingency operations. Display boards should be mobile in case the DCC has to relocate to an alternate area. All damage and status can be tracked in a laptop computer in case there is no time to remove boards so the DCC can be quickly set up at another location. Each contingency is different and may require different display boards but the following are necessary for the DCC to be kept abreast of the contingency situation:

14.7.3.1. Generator status, size, building number (if applicable), spares, fuel capacity and refueling times.

14.7.3.2. Vehicle listing for all CE vehicles.

14.7.3.3. Damage plotting; normally done on a base grid map, to include runway damage, unexploded ordnance (UXO), facilities, and utilities.

14.7.3.4. Barrier status, mobile aircraft arresting system (MAAS), or fixed arresting gear (if required).

14.7.3.5. Work in progress, indicating damage repair.

14.7.3.6. Radio call signs.

14.7.3.7. Team composition.

14.7.3.8. Personnel rosters (availability, by Air Force Specialty Code [AFSC]).

14.7.4. Supplies vary from location to location. The unit may be tasked to a bare base or other contingency that requires the use of bare-base assets. It is very important to read and understand the packing list of these assets. It is important to remember that most of the needed materials will probably come from the local economy. The DCC NCOIC must be familiar with purchasing regulations; know the contracting officer/NCO and supply NCO; know how to use the IMPAC card; and other available procedures to procure materials. Basic materials to augment base stockpiles may be available through the base contracting office, such as aggregate plumbing supplies, boxes, pallets, sandbags and ties, electrical supplies, and strap bands.

14.7.5. Contingency stockpiles are not normally maintained at Air Force bases. An adequate inventory of basic construction materials is on hand for initial recovery efforts through bench stock levels in each work area and stocks on hand. [Table 14.1.](#) gives quantities that could normally be expected to be immediately available on base.

Table 14.1. Basic Construction Material Stockpiles.

Material	Quantity	Location
Lumber	Bench stock	Carpenter shop/base supply
Plywood	Bench stock	Carpenter shop/base supply
Electrical	Bench stock/various	Electrical shop/base supply
Plumbing	Bench stock/various	Plumbing shop/base supply
Sheetrock	Bench stock	Carpenter shop
Sand	Varies (location)	Sand pile
Aggregate	Varies	Rock pile
Fuel pumps	Varies	Utilities shop
Fuel bowzers	Varies	Utilities shop
Sand bags	Varies	Pavements
Pumps	Varies	Pavements
Heavy equipment	Varies	Pavements
Bark chips	Varies	Pavements
Rebar	Varies	Pavements
Visqueen	Varies	Pavements

14.8. DCC Key Personnel.

14.8.1. Personnel assigned to the DCC are a vital part of the recovery operation. Depending on the availability of personnel, the following depicts typical manning in the DCC:

14.8.1.1. DCC OIC.

14.8.1.2. DCC NCOIC.

14.8.1.3. One or two operations management personnel (e.g., plotters, communications operator).

14.8.1.4. Logistics personnel (1).

14.8.1.5. Administrative personnel (1).

14.8.1.6. Explosive ordnance disposal (EOD) supervisor.

14.8.1.7. Engineers (1 to 3).

14.8.1.8. Readiness specialist (1).

14.8.1.9. Fire department representative; may be at a different location (maintain contact with fire alarm control center).

14.8.1.10. Superintendents.

14.8.2. The following list can be used to assign CE personnel to each position, as each contingency dictates.

14.8.2.1. SRC representative.

14.8.2.2. DCC OIC.

14.8.2.3. DCC NCOIC.

14.8.2.4. Fire chief.

14.8.2.5. Logistics supervisor.

14.8.2.6. RRR area supervisor.

14.8.2.7. Critical vehicles supervisor.

14.8.2.8. MAAS supervisor.

14.8.2.9. Airfield lighting supervisor.

14.8.2.10. RRR damage assessment supervisor.

14.8.2.11. Decontamination (DECON) supervisor.

14.8.2.12. Air base damage assessment.

14.8.2.13. Electrical supervisor.

14.8.2.14. Mechanical supervisor.

14.8.2.15. Structural supervisor.

14.8.2.16. Utilities section supervisor.

14.8.2.17. Disaster Preparedness Control Center (DPCC) supervisor.

14.8.2.18. EOD supervisor.

14.9. DCC Personnel Duties. Not all DCC personnel duties are described; local base procedures may differ from those described below.

14.9.1. On most occasions, the ranking operations management member is the NCOIC of the DCC and responsible for establishing and managing the DCC. The DCC is typically a contingency operation and the Production Control Center (PCC) is the peacetime version. During wartime or peacetime contingencies the DCC continues to process, direct, and deliver vital information to CE personnel.

The NCOIC reports directly to the OIC of operations and the BCE (or their representatives). Below are some checklists for the NCOIC.

14.9.1.1. Run the DCC position checklist for the OIC as follows:

- 14.9.1.1.1. Ensure all DCC positions are filled and the DCC activation checklist is being followed.
- 14.9.1.1.2. Supervise action as required.
- 14.9.1.1.3. Advise SRC when DCC activation checklist is completed.
- 14.9.1.1.4. Distribute the Developed Resource Priority List to DCC team chiefs.
- 14.9.1.1.5. Brief DCC staffs on entry control points, pass codes, and procedures.
- 14.9.1.1.6. Prepare for force beddown.
- 14.9.1.1.7. If necessary, the damage control officer will direct the establishment of a two-shift operation for the recovery force.
- 14.9.1.1.8. Know where assets are positioned.
- 14.9.1.1.9. Ensure contingency checklists are comprehensive and complete.
- 14.9.1.1.10. Termination of recovery operations and release of personnel is performed by the damage control officer.

14.9.1.2. Run DCC position checklists for the VCNCO as follows:

- 14.9.1.2.1. Identify all CES vehicle assets.
- 14.9.1.2.2. Recall all vehicle keys.
- 14.9.1.2.3. Control the Vehicle Operations Flight using the vehicle sign-out log in the DCC.
- 14.9.1.2.4. Review CES vehicle dispersal plan.
- 14.9.1.2.5. Advise OIC when assigned actions have been accomplished.

14.9.1.3. Run communication operator position checklists as follows:

- 14.9.1.3.1. Establish communications with the SRC.
- 14.9.1.3.2. Ensure all communication systems are operational, including radios and the secure telephone unit (STU).
- 14.9.1.3.3. Establish phone numbers to reach critical agencies.
- 14.9.1.3.4. Verify COMSEC procedures.
- 14.9.1.3.5. Advise OIC when assigned actions have been accomplished.

14.9.1.4. Run recorder or plotter position checklists as follows:

- 14.9.1.4.1. Ensure event status board and base/airfield maps are available and ready.
- 14.9.1.4.2. Plot wind speed, direction, and temperature.
- 14.9.1.4.3. Ensure written log sheets are available for a permanent record of events.
- 14.9.1.4.4. Advise OIC when assigned actions have been accomplished.

14.9.1.5. The following list displays the duties of the DCC controller:

14.9.1.5.1. Limit access to DCC.

14.9.1.5.2. Post a "Controlled Access" sign on the DCC door, including a list of those authorized for access.

14.9.1.5.3. Organize, display, and disseminate radio call signs in the DCC (SRC and fire department must get copies of the radio call signs).

14.9.1.5.4. Contingency checklists (or briefcases/field books), radios, and call signs are assigned to each team and OIC/NCOIC.

14.9.1.5.5. Verify that recovery teams are available for immediate dispatch (e.g., DAT, RRR, ABERO, Disaster Control Group [DCG]); give status to OIC/NCOIC.

14.9.1.5.6. Ensure utility maps, base and aircraft maps, other pertinent DCC information and flashlights are available to DCC and alternate DCC.

14.9.1.5.7. Advise OIC when assigned actions have been accomplished.

14.9.2. The Electrical Superintendent NCOIC will check the status of generators and aircraft arresting systems and notify DCC of status.

14.9.3. The Mechanical Superintendent NCOIC will check the status of fuels storage and dispensing.

14.9.4. The Material Control NCOIC will obtain the status of general supplies, such as lumber, piping, sheet metal, and cement, and notify the damage control officer.

14.9.5. Below is a brief description of teams that are associated with the WOC, SRC, and the DCC. These teams perform such tasks as RRR, damage assessment and repair, nuclear, biological, and chemical (NBC) survey, UXO removal, and other recovery tasks.

14.9.5.1. Damage Assessment Team (DAT). These are specialized teams comprised of a cross-section of AFSCs required to assess a general or specific type of damage, search and identify UXO, evaluate repair and demolition requirements, estimate manpower and equipment requirements, and coordinate on-scene recovery operations. They are dispatched to a location or area by the DCC.

14.9.5.2. Facilities Damage Assessment Team. Facilities damage is damage that occurs to everything except the airfield launch surface. Typically, three-person DAT teams will be dispatched to assess and report the damage, and the DART will expediently repair the damage.

14.9.5.3. Airfield Damage Assessment Team (ADAT). Airfield damage is damage that occurs to runways, taxiways, and aprons used to launch aircraft. Usually two three-person DAT teams are combined to form a six-person ADAT team.

14.9.5.4. Damage Assessment and Repair Team (DART). These teams are of variable sizes and AFSCs necessary to perform expedient repair of facilities and utilities other than RRR.

14.9.5.5. Specific-function DARTs.

14.9.5.5.1. Pavements. Rescues, wrecks, demolishes, excavates, clears and removes debris, repairs pavements, and decontaminates areas.

14.9.5.5.2. Structures. Rescues, demolishes, shores, repairs, and restores damaged facilities, and constructs temporary facilities.

14.9.5.5.3. Mechanical. Restores or expediently re-establishes essential utilities to critical base facilities.

14.9.5.5.4. Electrical. Restores or expediently re-establishes electrical power to critical base facilities.

14.9.5.5.5. Sanitation. Repairs, restores, or expediently re-establishes water and waste systems, conducts entomological prevention, and controls insects, rodents, pests, and vegetation.

14.9.5.6. Decontamination Team. These teams are variations to the DRT teams and include people specifically trained on decontamination equipment and procedures.

14.9.5.7. RRR Team. This team is composed of eleven specialized crews/functions and is responsible to assess and report damage to airfield pavements, plot damage to the airfield (craters, spalls, bomblets, UXO), select candidate minimum operating strips (MOS) of 15 meters by 1524 meters (50 feet by 5000 feet), and repair the pavement to allow aircraft operations off the MOS.

14.9.5.7.1. ADAT. ADATs assess war damage to airfield surfaces, report damage types, sizes, and locations to MOS selection crew and mark the location of the MOS centerline to be repaired.

14.9.5.7.2. MOS Selection Crew. This crew monitors incoming damage reports by ADAT teams, plots damage on a runway map, selects three candidate MOS strips, and briefs the DCC/SRC on the candidate locations for the commander's decision on which area to repair.

14.9.5.7.3. Crater Crew. This crew directs the repair of crater damage to the airfield surface.

14.9.5.7.4. Hauling Crew. This crew transports airfield repair vehicles, equipment, materials, and personnel to the repair site.

14.9.5.7.5. Mat Crews. This crew assembles aluminum AM-2 or fiberglass matting and places it over the repaired surface.

14.9.5.7.6. Spall Crew. This crew repairs spalled pavements with an elastomeric or asphaltic mix.

14.9.5.7.7. Centerline Crew. This crew paints the centerline on the new MOS.

14.10. Notification of Disaster. Upon notification of an actual or simulated disaster, the DCC performs the following actions:

14.10.1. The service call function will serve as the DCC and all current CE activities will be terminated until the disaster response is controlled.

14.10.2. Coordinate with the DCC OIC for the extent of implementation.

14.10.3. Maintain a record of events.

14.10.4. Initiate a recall of personnel depending on the time of day; use the pyramid or supervisor methods.

14.10.4.1. After normal duty hours, contact the commander to initiate a pyramid recall.

14.10.4.2. During normal duty hours, the DCC will contact all supervisors of branches/shops/sections by radio/telephone.

14.10.4.3. The orderly room should provide the status of personnel to determine who is TDY or on leave, and who should be expected to be available for duty.

14.10.5. Implement a sign-in location for recovery team personnel at the classroom.

14.10.6. Notify personnel to turn in radios and vehicles.

14.10.7. Issue radios and vehicles to damage response teams.

14.10.8. Ensure contingency checklists are comprehensive and complete.

14.11. Initiating Personnel Recall. When notified of a recall/mobilization initiated by the command post, activate the DCC per the CE commander and perform the following:

14.11.1. Initiate contingency response checklists if so directed by the SRC.

14.11.2. Develop personnel sign-in function (performed by the First Sergeant/orderly room).

14.11.3. Upon completion of the recall, report personnel strengths to the Mobility Control Center (MCC) in accordance with requirements established by the base mobility plan.

14.12. Pre-deployment Planning Overview. Operations management is a vital part of the pre-deployment planning and should be involved in all aspects, including the advance deployment team. The NCOIC of operations management could seek out what is available at the deployed site. These can be incorporated into your deployment kits. See [Attachment 2](#) for a guideline to collecting pre-deployment information to assist in the planning process.

14.12.1. The Joint Engineer Planning and Execution System (JEPES) is the computer model used by theater planners to estimate theater-level wartime requirements for facilities, construction material, and civil engineer capability in support of deployed U.S. forces.

14.12.2. The contingency response plan provides needed detail to permit rapid implementation of joint planning efforts.

14.12.3. In planning for any contingency, the civil engineer support plans should make maximum use of local resources. For operations of short duration, facility requirements normally will be met through the use of existing facilities, organic field equipment, and portable facility substitutes such as Harvest Falcon and Harvest Eagle sets. When the situation may involve long-term, sustained operations, maximum use will be made of modular or pre-engineered facilities and supporting utilities.

14.12.4. The civil engineer must consider environmental and force protection policies in support planning. The Environmental Impact Analysis Process (EIAP) must be conducted on contingency plans; performing the EIAP during planning may reduce or eliminate environmental impact that would otherwise result from contingency operations. In the absence of specific command guidance, engineers will analyze the threat and expected damage and plan for sufficient facility hardening, dispersal, NBC warfare defense, and camouflage to ensure the survival of adequate facilities, equipment, and personnel to continue essential combat support operations.

14.13. Mobility Overview. Mobility teams are management tools used to form the CE contingency response force. Once civil engineer personnel arrive at a deployed location, they organize into a work

force similar to that of the peacetime structure to accomplish force beddown requirements. The civil engineer work force then transitions into contingency response mode for performing post-attack recovery operations by forming specialized contingency response teams.

14.14. Prime BEEF Mobility Deployment. The principal objectives of the deploying Prime BEEF team is to beddown and support a deploying aircraft squadron. While there are numerous variables in size and mission associated with each type of aircraft, CE tasks are similar in type, though scope and intensity may vary greatly. The following subparagraphs give an overview of Prime BEEF's principal employment categories. Beddown constitutes the first and most important effort for civil engineer contingency employment.

14.14.1. Force Beddown.

14.14.1.1. Force beddown is divided into three categories: aircraft, personnel, and infrastructure support. Aircraft support provides maintenance shops, hangars, squadron operations facilities, munitions storage, fuel storage, and other facilities directly supporting the flying mission. Personnel support provides housing, feeding facilities, latrines, showers, administrative offices, and other indirect support facilities. Infrastructure support provides utility systems, solid and hazardous waste disposal, roads, and communications that serve the beddown site. Beddown locations range from main operating bases with adequate existing facilities to bare bases with no facilities other than runways, taxiways, and aircraft parking aprons. The unpredictable nature of Air Force deployments dictates that civil engineers are able to provide beddown support under a variety of conditions/scenarios. There are three beddown stages: initial, intermediate, and follow-on, leading to sustaining operations. The tasks below outline the most severe base development: a bare base. As more of a deployment base's facility and infrastructure assets are host-nation provided, the civil engineer's job focuses on repair, renovation, and O&M. Construction work done during this phase of operations, according to pre-established priorities, is as follows:

14.14.1.1.1. Category 1. Airfield: Runway, taxiways, hardstands, apron and other airfield pavements, navigation aids, barriers, airfield lighting and markings, overruns and approach zones.

14.14.1.1.2. Category 2. Sanitary Facilities: Kitchens, dining areas, showers and latrines.

14.14.1.1.3. Category 3. Direct Operational Support Facilities: Ammo storage and aviation fuels and lubricants storage and distribution.

14.14.1.1.4. Category 4. Maintenance, Operations and Supply Facilities: Aircraft maintenance, base shops, operations buildings, base communications, photo labs, fire stations, weather facilities, general storage and medical.

14.14.1.1.5. Category 5. Indirect Operational Support Facilities: Roads and exterior utilities (water supply, electric power, central heat plant).

14.14.1.1.6. Category 6. Administration and Special Housing: Headquarters, personnel services, recreation and welfare, enlisted and officer quarters.

14.14.1.1.7. Category 7. General Housing: Enlisted and officer quarters.

14.14.1.2. Beddown Task List. This sample beddown task list could be used in any contingency. By determining the number of personnel and aircraft type, team compositions and priorities can be determined.

- 14.14.1.2.1. Appoint an office of primary responsibility (OPR) from CE for developing the force beddown plans.
 - 14.14.1.2.2. Obtain a map of the base or area where the beddown will be required.
 - 14.14.1.2.3. Establish a POC for the beddown plan with the logistics plans division (LGX), host nation, and other agencies as required.
 - 14.14.1.2.4. Obtain data from LGX about in-bound forces. Include the number of in-bound personnel, amount of equipment and or supplies, and arrival times.
 - 14.14.1.2.5. Obtain specific information from other agencies or units to be bedded down, including proposed asset dispersal locations and complete functional area location for each agency or unit.
 - 14.14.1.2.6. Develop a beddown construction priorities list; include all functions to be bedded down, their specific location, and specific construction requirements, including hardening requirements. Ensure that priorities are sanctioned by the US forces command element (agreed upon by all key agencies).
 - 14.14.1.2.7. Determine the number of people to be bedded down (male and female officers, male and female airmen).
 - 14.14.1.2.8. Complete an administration/housing space requirements table based on the number of people to be bedded down.
 - 14.14.1.2.9. Determine the number of tents required for administration and housing facilities.
 - 14.14.1.2.10. Complete an administration/housing tent summary table.
 - 14.14.1.2.11. Determine a concept proposal for the tent city for briefing to the SRC. Include the tent city layout (layout will be determined according to situation), functional locations within the tent city, proposed expansion plan (for beddown of additional forces), utility requirements and proposed connections (water, electricity, sewer).
 - 14.14.1.2.12. Develop a construction plan/work schedule for CE operations to perform required construction in priorities dictated by the beddown construction priorities list.
 - 14.14.1.2.13. Ensure the host nation representative is kept informed at each step of the bed-down process, especially on proposed construction.
- 14.14.1.3. Initial Beddown Stage. During the initial stage of base development, civil engineer efforts are concentrated on accomplishing the tasks necessary to meet the mission requirement within 72 hours. The following outlines typical tasks accomplished during the initial phase of bed-down:
- 14.14.1.3.1. Develop and establish water points.
 - 14.14.1.3.2. Haul water to purification site.
 - 14.14.1.3.3. Establish basic water treatment plant.
 - 14.14.1.3.4. Haul potable water to water points or pump to distribution system.
 - 14.14.1.3.5. Establish around-the-clock airfield support operations.
 - 14.14.1.3.6. Inspect and repair/mark airfield pavements as required.

- 14.14.1.3.7. Verify aircraft arresting system serviceability or install MAAS.
- 14.14.1.3.8. Verify airfield lighting serviceability or install emergency airfield lighting system.
- 14.14.1.3.9. Establish fire protection capability, particularly flightline fire/crash/rescue.
- 14.14.1.3.10. Assist with fuel system setup.
- 14.14.1.3.11. Provide mission-essential power to critical facilities using mobile generators.
- 14.14.1.3.12. Set-up emergency/security area lighting.
- 14.14.1.3.13. Perform EOD inspection of entire installation.
- 14.14.1.3.14. Set up engineer command and control center and billeting/dining area.
- 14.14.1.3.15. Operate engineer control center to control work effort for duration of deployment.
- 14.14.1.3.16. Establish munitions holding area.
- 14.14.1.3.17. Prepare site plan for entire installation (e.g., facilities, roads, utility systems).
- 14.14.1.3.18. Provide site preparation support for navigation aids and mission-critical facilities.
- 14.14.1.3.19. Lay out facility groups and roads; grade primary roads to major facility group areas.
- 14.14.1.3.20. Start layout of utility systems.
- 14.14.1.3.21. Assist with shelter setup.
- 14.14.1.3.22. Establish force protection measures in conjunction with Security Forces.
- 14.14.1.3.23. Establish engineer supply points.
- 14.14.1.3.24. Establish basic base defense network.
- 14.14.1.3.25. Check host nation environmental restrictions/regulations for water, waste, and siting.
- 14.14.1.3.26. Establish environmental protection plan.
- 14.14.1.3.27. Establish expedient field latrines.
- 14.14.1.3.28. Establish a taxi/bus service to move work crews to and from work areas.
- 14.14.1.3.29. Establish base alerting system and contamination control areas.
- 14.14.1.3.30. Establish locations for NBC detectors, collective protection systems, and contamination control areas.
- 14.14.1.3.31. Perform initial hazards survey for radiological waste, heavy metals, and other hazardous materials (HAZMAT).
- 14.14.1.3.32. Prepare base denial plan.
- 14.14.1.3.33. Obtain, disseminate, and maintain information on:

14.14.1.3.33.1. Threat-related details and instructions (force protection purposes).

14.14.1.3.33.2. Site-specific environmental needs and precautions (heat/cold/survival information).

14.14.1.3.33.3. Initial and planned command, control, and communications details, including systems, personnel, positions, responsibilities, and locations (tools to "hit the ground running").

14.14.1.3.33.4. Reporting and documentation requirements to satisfy the wing and the MAJCOM. This data is needed to build lessons learned.

14.14.1.3.33.5. Local contracting authority.

14.14.1.4. Intermediate Beddown Stage. During the intermediate stage of base development, emphasis is on either erecting all Harvest Falcon assets or ensuring serviceability of existing facilities, and placing utility systems in service. Some engineer manpower is devoted to system O&M. The intent during this stage is to provide the ability for all base agencies and functions to establish operating capability within the first ten days of deployment.

14.14.1.4.1. Lay out aircraft revetments and start construction.

14.14.1.4.2. Expand aircraft parking areas as required.

14.14.1.4.3. Construct expedient berms for the munitions storage area.

14.14.1.4.4. Clear hazards in airfield clearance zones.

14.14.1.4.5. Clear perimeter areas and expand base defense network.

14.14.1.4.6. Establish fully functioning water plant.

14.14.1.4.7. Install aboveground pipeline and pumps from water source to treatment plant.

14.14.1.4.8. Lay out flexible hose for initial water distribution system to latrines, kitchens, and storage.

14.14.1.4.9. Connect facilities and systems requiring water to the flexible hose distribution system.

14.14.1.4.10. Start aboveground layout and connection of hardwall water distribution system after the softwall distribution system is in service.

14.14.1.4.11. Install static grounds at fueling points, arming pads, hot cargo pads, maintenance areas, and munitions areas.

14.14.1.4.12. Identify utility isolation points.

14.14.1.4.13. Establish field-deployable latrines and shower/shave units.

14.14.1.4.14. Establish a waste collection capability using sewage collection trailers.

14.14.1.4.15. Start construction of evaporation ponds/stabilization lagoons.

14.14.1.4.16. Level sites and construct berms and dikes for POL storage areas.

14.14.1.4.17. Grade road network throughout installation.

14.14.1.4.18. Establish power plant using 750-kilowatt generators.

- 14.14.1.4.19. Lay out and connect electrical distribution system.
 - 14.14.1.4.20. Connect base facilities to power system.
 - 14.14.1.4.21. Place available mobile electric power (MEP) generators into service as backup power for mission-essential facilities after primary power is established.
 - 14.14.1.4.22. Develop load-shedding plan.
 - 14.14.1.4.23. Erect engineer maintenance and shop facilities.
 - 14.14.1.4.24. Provide technical guidance to other base organizations on temporary facility erection.
 - 14.14.1.4.25. Start sanitary landfill operation (in an area that will not create a bird air strike hazard).
 - 14.14.1.4.26. Install heaters in facilities.
 - 14.14.1.4.27. Establish environmental protection procedures (i.e., develop spill control plans).
 - 14.14.1.4.28. Establish hazardous waste control areas.
 - 14.14.1.4.29. Prepare site-specific plans for operations in an NBC-contaminated environment.
 - 14.14.1.4.30. Stand up NBC operations cell and reconnaissance teams.
 - 14.14.1.4.31. Create facility priority lists and pre-fire plans for emergency response.
- 14.14.1.5. Follow-on Beddown Stage. During the follow-on stage, Harvest Falcon or Harvest Eagle final installation takes place and survivability enhancements to the base's facilities are accomplished. Most of these tasks should be completed within the first 30 days.
- 14.14.1.5.1. Build fixed defensive fighting positions around base perimeter.
 - 14.14.1.5.2. Build and place obstacles supporting base defense requirements.
 - 14.14.1.5.3. Construct basic personnel shelters for survivability purposes.
 - 14.14.1.5.4. Bury the hardwall water distribution system.
 - 14.14.1.5.5. Connect all facilities requiring water to the hardwall pipe system.
 - 14.14.1.5.6. Harden critical facilities/utilities nodes with revetments, sandbags, and berms.
 - 14.14.1.5.7. Install air conditioners.
 - 14.14.1.5.8. Construct aircraft and vehicle wash racks.
 - 14.14.1.5.9. Install Harvest Falcon sewage collection system.
 - 14.14.1.5.10. Connect showers and latrines to sewage collection system.
 - 14.14.1.5.11. Bury aboveground electrical distribution cables.
 - 14.14.1.5.12. Establish ice-making capabilities within the water plant.
 - 14.14.1.5.13. Modify host nation facilities for U.S. use.
 - 14.14.1.5.14. Site and develop dispersal locations.
 - 14.14.1.5.15. Perform CCD activities with available resources.

14.14.1.5.16. Prepare an emergency disposal range for EOD use in munitions destruction.

14.14.2. Sustainment. The transition from beddown to sustainment is reached when most of the temporary assets (e.g., Harvest Falcon) support work is complete and the engineer's operational focus shifts to operations, maintenance, and upgrade activities. The anticipated duration of the deployment drives the extent of many of these activities. During peacetime, work requests generally come to the PCC on the AF Form 332. During a contingency the information may come over a phone, radio, verbally, or written. The main concept is to track and record the work request. As time allows, the paperwork can be completed and formally prepared. It is very important to track and maintain the log of work requests. Most requests that come during a contingency are real-world and needed immediately in the eyes of the requestor. This may not be a priority in the eyes of the SRC and DCC. The SRC will determine the priorities and the way and manner in which the requests will be accomplished. This could mean that you do nothing, make expedient repairs, or simply hold the requests for later.

14.14.3. Reconstitution. Prime BEEF and all other users of bare-base facilities and equipment are responsible for properly preparing their facilities and equipment for loading and shipment. Facilities and equipment are packaged and marshaled in accordance with the guidance provided in the redeployment section of the unit mobility plans and in a manner that provides the least disruption of base support. CE personnel aid others in the packaging and marshaling of their facilities and equipment on a time-available basis. Each user is responsible for bare-base asset preparation and turn-in to aerial port personnel for eventual loading and transport. This preparation includes cleaning, damage reporting, proper packing, and delivery to a designated location. Reconstitution phasing will typically be incremental and associated with the planned phase-down of the base support functions. Other units will typically accomplish the depot-level reconstitution of bare-base assets. Depot-level reconstitution for the various end-item assets includes replacement of missing parts, repairing damaged items, and repackaging and storage for the next use.

14.14.3.1. Improve personnel protective shelters.

14.14.3.2. Increase hardening features of base facilities.

14.14.3.3. Increase security measures such as area lighting and fencing.

14.14.3.4. Replace temporary pavement surfaces or repairs with permanent fixes.

14.14.3.5. Construct permanent berms for munitions storage areas.

14.14.3.6. Provide maintenance and repair support to Harvest Falcon/Harvest Eagle assets and U.S.-used in-place facilities/utilities.

14.14.3.7. Provide essential services such as utility plant operation, refuse collection, airfield sweeping, snow removal, fire protection, environmental protection, and hazardous waste management.

14.14.3.8. Upgrade roads through use of soil, cement, asphalt paving, or crushed stone.

14.14.3.9. Construct flooring in non-critical facilities.

14.14.3.10. Establish material stocks for potential base recovery efforts.

14.14.3.11. Develop contingency response plans for base recovery and natural disasters.

14.14.3.12. Establish supply contracts with local vendors.

14.14.3.13. Develop contingency training and exercise programs.

14.14.3.14. Provide quality-of-life improvements, such as increased square footage and air conditioning.

14.14.3.15. Construct recreational facilities.

14.14.3.16. Provide increased utility support to outlying and heavily populated areas.

14.14.3.17. Construct protective structures such as sunshades and wind breaks.

14.14.3.18. Identify augmentation teams for shelter operations, contamination control areas, and Base Recovery After Attack (BRAAT) operations.

14.14.4. Restoration. At the conclusion of the deployment, the host nation-owned land and facilities made available for U.S. use must be restored. The host nation status of forces agreement or other binding bilateral document will normally describe the restoration conditions required (paragraph 14.15.). The civil engineer will be responsible for accomplishing this task or coordinating with the host nation to have it done. Typically, the restoration will be done by contract, usually through host nation auspices. Site restoration to host nation-stipulated conditions is an important step to successfully bring final closure to the deployment. An inadequate site restoration effort could generate adverse political, environmental, and economic ramifications.

14.15. Host Nation Issues.

14.15.1. Support Agreements. Host nation support agreements vary from country to country and can be very complex. The civil engineer work request may affect the agreement, so it is important that the agreements and limitations are understood. Typically, host nation support agreements are written by the BCE and reviewed and negotiated by the contracting officer and, depending on the complexity of the agreement, reviewed by Air Force legal personnel. A memorandum of understanding (MOU) is the same as an agreement.

14.15.2. Other Support. Besides land and facilities, host nation agreements may specify labor, supplies, equipment, and base services that the host nation will provide. Even if there is no specific requirement to use host nation support, at most locations local nationals can provide services such as refuse and hazardous waste collection, construction equipment rental, supply delivery, custodial support, and varying degrees of construction, base maintenance, and utility systems support. Depending on the deployment mission and identified threats, force protection measures may mitigate against extensive use of local national labor.

14.15.3. Real Property. The minimum requirement for deployment of an Air Force flying unit to a specific location is a runway and water. The host nations supporting the deployment offer one of two real property conditions: occupied or unoccupied host nation air bases. For non-flying deployments the host nation-offered real property support will normally be tied as closely to the mission requirements as possible, but could be simply an isolated, bare piece of land.

14.15.4. Bases. In situations where U.S. forces deploy to host nation-occupied air bases (collocated operating bases), they become tenants with specific facilities and areas of the base made available. Under these conditions the host nation shares the airfield (runway, taxiways, and parking aprons), but proffered airfield buildings and base support facilities will probably be limited. CE must plan and develop the U.S. portion of the base to accommodate the deployed forces, factoring in renovation, maintenance, and repair requirements for existing facilities and infrastructure. At locations where the U.S. is offered an unoccupied host nation base, CE can usually expect a significant amount of renova-

tion, maintenance, and repair effort to meet minimum deployment requirements. Joint support agreements, status of forces agreements, or other country-to-country agreements will dictate tenant and host responsibilities throughout the deployment.

14.15.5. Non-flying Deployments. Normally the host nation and the U.S. will have agreed to the provision of specific land, facilities, and other infrastructure to meet the deployment's mission needs. Conditions range from full facility and utility support to nothing but a bare piece of land at the right location. CE must plan and develop a comprehensive package to ensure all infrastructure aspects of the deployment are met. Joint support agreements, status of forces agreements, or other country-to-country agreements will dictate U.S. responsibilities throughout the deployment.

14.16. Post-deployment Planning. Post-deployment planning is as important as pre-deployment planning and is weighed on the size and nature of the contingency. If it was a full bare-base beddown or natural disaster, and Air Force equipment and supplies are scattered about, they must be cleaned, repaired, and stored which requires a logical and systematic approach. Every contingency is different and levels of effort will change. The contingency, work requests, and the list of equipment and supplies that were used must be logged. Once the work outlines have been developed to start the cleanup and repackaging of the equipment and supplies, execute the reconstitution and restoration.

14.17. After-action Reports. After-action reports are necessary to give leaders, planners, and MAJCOMs the positive and negative results. Reports offer the opportunity to explain what happened, why it happened, what worked and didn't work, and recommend changes to the way the operation was executed. This flow of information is based on the accumulation of data that the DCC has collected. An after-action report can be simple or complex; it is difficult to judge the size or complexity of the report without knowing the contingency. If the report is based on a regional conflict such as Desert Storm, then the report will be quite complex with many players. If it is a small recovery effort (fire, tornado) in a local community then the report would be a simple report. Normally during natural disasters or other incidents, civilian agencies, such as the Federal Emergency Management Agency (FEMA) or local police will contain or manage the contingency. During a major war or major military operations other than war (MOOTW), or other major military operation, CE will be heavily involved and commanders will rely on civil engineer expertise and documentation to generate reports. As a general rule, any problems that occur with equipment, contracts with locals, supplies, and manpower should be tracked. The following are typical topics or sections of after-action reports that can be generated from the data collected.

14.17.1. Personnel. This report involves the CE personnel, by AFSC, that were involved in the contingency, typically to determine if the skill composition was correct.

14.17.2. Equipment. This report explains what type of equipment was used. If bare base, it could be Harvest Falcon sets and any problems associated with the equipment.

14.17.3. Supplies. Supplies are always a challenge and it seems that there is never enough of one item and too much of another. Logistics play a large part if the material is coming from CONUS to OCONUS. In some situations equipment and supplies come at the wrong time or sequence. If there is a problem in this area, the situation needs to be tracked and reported so before the next contingency the situation may be corrected. Do not forget the damage reports for bare base assets.

14.17.4. Contracts with Local Suppliers/Contractors. This report involves QAE responsibilities, time, and energy. The reports generated from this involve many players. The contract could not be written

well, may not cover enough areas, or any combination of things. This normally can be corrected in the field with change orders and addendums.

14.17.5. Other Reports. No two contingencies will be the same and all have unique challenges. There are many other after-action reports that may need to be generated and it is difficult to determine until the situation arises.

14.18. Cargo.

14.18.1. Re-palletize Cargo. This function typically relates to unique unit requirements such as consolidated tool kits, individual tool kits, and other unit equipment. The principle works the same as reconstitution. Inventory all equipment and supplies that were brought, make a list of broken, damaged, or missing parts, and when the unit arrives back at home station, repair, replace, clean and re-palletize the unit's equipment to make sure the unit is ready for the next contingency. The following checklist may assist in re-palletizing your equipment. Members on the team should be trained on pallet build-up. There are several ways to position Prime BEEF equipment on a pallet. If possible, check with the aircraft loadmaster to determine the requirements.

14.18.2. Palletized Cargo List.

14.18.2.1. Typically, all pallets are shipped with three-point dunnage, and the pallets are 100 millimeters by 100 millimeters (4 inches by 4 inches), with a minimum length of 2.24 meters (88 inches).

14.18.2.2. Pallets should be clean and free of oil and grease.

14.18.2.3. Pallets should not be warped, which may affect or bind the dual rail system during the loading process.

14.18.2.4. There must be no bent lips on either side of the 2.24-meter pallet.

14.18.2.5. Is the pallet and load compatible with the aircraft width, height, and weight limitations?

14.18.2.5.1. C-141 and C-5 Aircraft. Pallet cargo dimensions are 2.13 meters (84 inches) long by 2.64 meters (104 inches) wide; no safety aisle is required.

14.18.2.5.2. C-130 Aircraft. Pallet cargo dimensions are as follows:

14.18.2.5.2.1. At least 355 millimeters (14 inches) between the outer edge of the cargo and the aircraft, beginning no more than 914 millimeters (36 inches) above the cargo floor.

14.18.2.5.2.2. At least 762 millimeters (30 inches) between the outer edge of the cargo and the aircraft, beginning no more than 1.5 meters (60 inches) above the cargo floor.

14.18.2.6. All tie-down equipment must be functional.

14.18.2.7. Netting will consist of two side nets and one top net, and they must be connected and tightened securely.

14.18.2.8. All tie-down equipment must be tightened securely to hold all cargo firmly to the pallet.

14.18.2.9. Any loose or free cargo on the pallet is prohibited.

14.18.2.10. All strap ends must be stowed to prevent interference with the aircraft rail and roller system.

14.18.2.11. All pallets require a plastic covering that must be under the netting and straps. The plastic must cover all the cargo; fiberglass containers do need a plastic cover.

14.18.2.12. Is hazardous cargo readily visible and accessible on the pallet? Is DD Form 1387-2, **Special Handling Data/Certification**, filled out and attached to the cargo? Is the Shippers Declaration of Dangerous Goods (SDDGS) visible and firmly attached to the cargo?

14.18.2.13. Pallets are limited to 250 pounds per square inch loading.

14.18.2.14. Is the packing list attached to all containers on the pallet?

14.18.2.15. Is the load list attached to the fiberglass containers?

14.18.2.16. Has all the proper paperwork been prepared and delivered to the Mobility Processing Center?

14.19. Forms Prescribed.

14.19.1. Prescribed Forms. No forms are adopted in this publication.

14.19.2. Adopted. AF Form 9, **Request for Purchase**, AF Form 20, **Repair Cost and Reparable Value Statement**, AF Form 55, **Employee Safety and Health Record**, AF Form 103, **Base Civil Engineering Work Clearance Request**, AF Form 171, **Request for Driver's Training and Addition to U.S. Government Drivers License**, AF Form 198, **Report of Survey for Air Force Property**, AF Form 327, **Base Civil Engineer Work Order**, AF Form 332, **Base Civil Engineer Work Request**, AF Form 457, **USAF Hazard Report**, AF Form 561, **Base Civil Engineer Weekly Work Schedule**, AF Form 637, **BCE Job Order Log**, AF Form 813, **Request for Environmental Impact Analysis**, AF Form 813, **Request for Environmental Impact Analysis**, AF Form 919, **BCE In-Service Work Plan Sheet**, AF Form 1081, **BCE Work Request/Work Order Register**, AF Form 1219, **BCE Multi-Craft Job Order**, AF Form 1255, **Quality Control Evaluation**, AF Form 1445, **Materials and Equipment List**, AF Form 1487, **Fire Prevention Visit Report**, AF Form 1800, **Operator's Inspection Guide and Trouble Report (General Purpose Vehicles)**, AF Form 1841, **Maintenance Action Sheet**, AF Form 1879, **BCE Job Order Record**, AF Form 2005, **Issue/Turn-In Request**, AF Form 2293, **U.S. Air Force Motor Vehicle Operator Identification Card**, AF Form 2296, **Vehicle Operator's Information**.

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DCS/Installations & Logistics

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

Title 31 United States Code, *Money and Finance*, Section 1349

DOD 7000.14-R, *DOD Financial Management Regulations*

DODD 4001.1, *Installation Management*

DODD 4165.6, *Real Property Acquisition, Management, and Disposal*

DODD 4500-9, *Transportation and Traffic Management*

DODI 4150.7, *DOD Pest Management Program*

DODI 7040.4, *Military Construction, Authorization and Appropriation*

AFMAN 10-206, *Operational Reporting*

AFI 10-211, *Civil Engineering Contingency Response Planning*

AFPAM 10-219V1, *Contingency and Disaster Planning*

AFPAM 10-219V2, *Preattack and Predisaster Preparations*

AFPAM 10-219V3, *Postattack and Postdisaster Procedures*

AFPAM 10-219V4, *Rapid Runway Repair Operations*

AFPAM 10-219V5, *Bare Base Conceptual Planning Guide*

AFPAM 10-219V10, *Contingency Training Guide and Task Standard*

AFH 10-222V1, *Guide to Bare Base Development*

AFH 10-222V2, *Guide to Bare Base Assets*

AFH 10-222V4, *Environmental Guide for Contingency Operations*

AFH 10-222V5, *Guide to Bare Base Power Plant Installation*

AFH 10-222V6, *Guide to Bare Base Facility Erection*

AFH 10-222V7, *Emergency Airfield Lighting System (EALS)*

AFH 10-222V8, *Guide to Mobile Aircraft Arresting System Installation*

AFH 10-222V9, *Guide to Reverse Osmosis Water Purification Unit Installation and Operation*

AFH 10-222V10, *Guide to Harvest Falcon Electrical System Installation*

AFH 10-222V12, *Guide to Bare Base Mechanical Systems, Part 1*

AFH 10-222V14, *Guide to Fighting Positions, Obstacles, and Revetments*

AFH 10-222V22, *Refugee Camp Planning and Construction Handbook*

AFMAN 23-220, *Reports of Survey for Air Force Property*

AFI 24-301, *Vehicle Operations*

AFI 24-302, *Vehicle Operations Management*

AFMAN 24-306, *Manual for the Wheeled Vehicle Driver*

AFI 24-307, *Procedures for Vehicle Operations Management*

AFPAM 24-317, *Vehicle Control*

AFI 31-201, *Security Police Standards and Procedures*

AFI 32-1001, *Operations Management*

AFPAM 32-1004V3, *Working in the Operations Flight Facility Maintenance*

AFMAN 36-2108, *Enlisted Classification*

AFI 91-204, *Safety Investigations and Reports*

AFOSH Standard 91-10, *Civil Engineering*

AFOSH Standard 161-21, *Hazard Communication Program*

Air Force Qualification Training Package (AFQTP) Module 14, 3E6X1 AFSC, *Specific Contingency Responsibilities*

OPLAN 32-1, *Disaster Preparedness Operations Plan*

Technical Order (T.O.) 36A-1-1301, *Vehicle Management Index File*

UFC 3-260-01, *Airfield and Heliport Planning and Design*

FAR Part 77, *Objects Affecting Navigable Airspace*

Abbreviations and Acronyms

ABERO—Air Base Emergency Repair Operations

ACES—Automated Civil Engineer System

ADAT—Airfield Damage Assessment Team

AETC—Air Education and Training Command

AF—Air Force

AFCESA—Air Force Civil Engineer Support Agency

AFH—Air Force handbook

AFI—Air Force instruction

AFMAN—Air Force manual

AFOSH—Air Force Occupational Safety and Health

AFPAM—Air Force pamphlet

AFQTP—Air Force Qualification Training Package

AFSC—Air Force Specialty Code

ANG—Air National Guard

ATA—Actual time accounting
BCE—Base civil engineer
BES—Bioenvironmental engineering services
BOI—Basis of issue
BOM—Bill of materials
BRATT—Base recovery after attack
Btuh—British thermal units per hour
BX—Base exchange
CATEX—Categorical exclusion
CCD—Camouflage, conceal, and deception
CDC—Career Development Course
CE—Civil engineer
CEMAS—Civil Engineer Material Acquisition System
COCES—Computer-Operated Civil Engineering Supply Store
CONUS—Continental United States
CSC—Customer service center
CSU—Customer service unit
CWON—Collection work order number
DART—Damage Assessment and Repair Team
DAT—Damage Assessment Team
DCC—Disaster Control Center
DCC—Damage Control Center
DD—Department of Defense
DECON—Decontamination
DIN—Do-it-now
DMAG—Depot Maintenance Activity Group
DOD—Department of Defense
DPCC—Disaster Preparedness Control Center
DRT—Damage Response Team
DSW—Direct scheduled work
DV—Distinguished visitor
EIAP—Environmental Impact Analysis Program

EOD—Explosive Ordnance Disposal
EPA—Environmental Protection Agency
EPS—Engineering Performance Standard
ESD—Estimated start date
ETA—Exceptional time accounting
FAA—Federal Aviation Administration
FAR—Federal Aviation Regulation
FM—Facility manager
FSDC—Fire Safety Deficiency Code
FUB—Facilities Utilization Board
GOCESS—Government-Operated Civil Engineering Supply Store
GOQ—General officer quarters
GOV—Government vehicle
GPC—Government Purchasing Card
GSA—General Services Administration
HAZCOM—Hazard communication
HAZMART—Hazardous Materials Pharmacy
HAZMAT—Hazardous materials
HQ AFSOC/LGTV—Headquarters Air Force Special Operations Command, Vehicle Maintenance
HQ USAF—Headquarters, United States Air Force
HQ/LGT—Headquarters, Director of Transportation
I&S—Interchangeability and substitute
IC—Installation commander
IG—Inspector General
IMPAC—International Merchant Purchase Authorization Card
IWMS—Interim Work Management Information System
IWP—In-service work package
JEPES—Joint Engineer Planning and Execution System
kVA—Kilovolt-ampere
LG—Logistics Group
LGX—Logistics plans division
LIMFAC—Limiting factor

LOGCES—Logistics Civil Engineering Support
LTI—Limited technical inspection
LUC—Labor utilization code
LVD—Vehicle Maintenance Director, Item Management Division
MAAS—Mobile Aircraft Arresting System
MAJCOM—Major command
MAS—Maintenance Action Sheet
MC—Minor construction
MCC—Mobility Control Center
MCP—Military construction project
MEDEVAC—Medical evacuation
MEL—Minimum essential level
MEP—Mobile electric power
MFH—Military family housing
MKT—Mobile kitchen trailer
MOOTW—Military operations other than war
MOS—Minimum operating strip
MOU—Memorandum Of Understanding/Agreement
MPH—Military Public Health
MRE—Meal Ready to Eat
MSDS—Material Safety Data Sheet
MWOA—Master Work Order Active
MWR—Morale, Welfare, Recreation
NEPA—National Environmental Policy Act
NSN—National Stock Number
O&M—Operations and management
OCONUS—Outside Continental United States
OI—Operating Instructions
OIC—Officer in charge
OPLAN—Operations Plan
OPR—Office of primary responsibility
ORL—Operator Records and Licensing

OSHA—Occupational Safety and Health Administration

PAPI—Precision approach path indicator

PCC—Production Control Center

PCS—Permanent change of station

PLASI—Pulse light approach slope indicator

PM—Project manager

POC—Point of contact

POD—Permissible operating distance

POL—Petroleum oil lubricants

Prime BEEF—Priority Improved Management Effort – Base Engineer Emergency Force

QAE—Quality Assurance Evaluator

RAC—Risk Assessment Code

RDD—Required delivery date

RDO—Regular day off

REPOL—Reporting Emergency Petroleum, Oil, Lubricants

RPIE—Real property installed equipment

RRI—Reimbursement Refund Indicator

RRR—Rapid Runway Repair

RWP—Recurring Work Program

SABER—Simplified Acquisition of Base Engineer Requirements

SBSS—Standard Base Supply System

SDDGS—Shipper's Declaration of Dangerous Goods

SF—Standard Form

SITREP—Situation Report

SRC—Survival Recovery Center

SRT—Spill Response Team

TA—Table of Allowance

TDY—Temporary duty

UCMJ—Uniform Code of Military Justice

UDI—U-drive-it

UXO—Unexploded ordnance

VCNCO—Vehicle control noncommissioned officer

VCO—Vehicle control officer

VMM—Vehicle maintenance manager

VMS—Vehicle maintenance superintendent

VOM—Vehicle operations manager

VOO—Vehicle operations officer

WOC—Wing Operations Center

WR-ALC—Warner Robins Air Logistics Center

Attachment 2

PRE-DEPLOYMENT INFORMATION

A2.1. Introduction. Collect this information for use during preliminary planning. The deployment information, whether the location is OCONUS or CONUS, needs to be channeled through the Civil Engineering Squadron commander (CES/CC). Local dissemination of the information to the clinic, food services, military pay, logistics, personnel, and base operations functions will allow these units time to prepare for any request your unit may present to them. This information needs to be distributed at the earliest possible time. Each deployment into field conditions is unique and the requirements can and will change. It is the responsibility of the OIC and NCOIC to insure that all requirements and conditions are met.

A2.2. General Information. Collect the following general information:

- A2.2.1. Name, rank, and contact phone number of the POC at the deployed location.
- A2.2.2. Deployment number.
- A2.2.3. Deployment location.
- A2.2.4. Dates of deployment.
- A2.2.5. Whether or not an advance team will be deployed.
- A2.2.6. Fund cite.

A2.3. Airlift. Collect the following airlift information:

- A2.3.1. Whether it will be military or commercial airlift.
- A2.3.2. Name, unit, rank, and contact phone number of the airlift POC.
- A2.3.3. Date of arrival.
- A2.3.4. Aircraft type and tail number.

A2.4. Host Nation/Unit Information. This information can be used for all deployments (OCONUS, CONUS, austere conditions), regardless of location or conditions.

A2.4.1. Administrative. Collect the following administrative information:

- A2.4.1.1. American Red Cross phone number.
- A2.4.1.2. Host unit POC, mailing address, and all phone numbers, including commercial/DSN, fax, emergency, and after duty hours.
- A2.4.1.3. Normal duty hours of the host unit.
- A2.4.1.4. Availability of computers and or typewriters.
- A2.4.1.5. Orderly room availability (if available, obtain the building number).
- A2.4.1.6. Availability of phones (if available, obtain the phone numbers).
- A2.4.1.7. Availability of radios.
- A2.4.1.8. Mail delivery address.

A2.4.1.9. Building number of the storage facility for tools and equipment (also determine if it is a secure storage area).

A2.4.1.10. Weapons and ammunition storage availability.

A2.4.1.11. Determine if DCC equipment is required.

A2.4.1.12. Determine if security clearances are required.

A2.4.1.13. Determine if flight line badges are required.

A2.4.2. Quarters. Answer the following questions to collect quarters information:

A2.4.2.1. Are team members housed on base or in off-base contract quarters?

A2.4.2.2. If on base, what are the building numbers and phone numbers for each category of quarters (officer, enlisted)?

A2.4.2.3. If off base, what is the address and phone number?

A2.4.3. Weather. Collect the following weather information:

A2.4.3.1. Expected local weather conditions.

A2.4.3.2. Temperature and humidity.

A2.4.3.3. Types of precipitation (rain, snow).

A2.4.3.4. Any extreme weather conditions.

A2.4.3.5. Determine if A, B, or C bags are required.

A2.4.4. Transportation. Collect the following transportation information:

A2.4.4.1. Name and phone number of the POC for vehicles at the deployment location.

A2.4.4.2. Quantity and types of vehicles assigned to the deployed unit.

A2.4.4.3. Type and availability of the following heavy equipment: dozer; dump truck; backhoe; grader; trencher; front-end loader; forklift; and any other heavy equipment.

A2.4.4.4. Availability of rental cars in the local area (if available, find out the rates).

A2.4.4.5. Availability of public transportation on and off base.

A2.4.4.6. Determine if GOVs are permitted off base after duty hours.

A2.5. Contingency Projects/Natural Disasters.

A2.5.1. The host unit needs to provide copies of the following information or have it available:

A2.5.1.1. Completed AF Form 327, **Base Civil Engineer Work Order**.

A2.5.1.2. Completed AF Form 332, **Base Civil Engineer Work Request**.

A2.5.1.3. Completed AF Form 103, **Base Civil Engineer Work Clearance Request**.

A2.5.1.4. Detailed work description and scope of work.

A2.5.1.5. Planning sheets.

A2.5.1.6. Completed material list for all projects and the status of materials.

A2.5.1.7. Completed design drawings.

A2.5.1.8. POCs for each project assigned to the deployed unit.

A2.5.1.9. Base maps and project locations.

A2.5.2. Tools. Answer the following questions to collect information about tools:

A2.5.2.1. Will the projects require special tools?

A2.5.2.2. Can the host unit rent tools?

A2.5.2.3. What tools are available from the host unit?

A2.6. Host Nation/Unit Key Personnel. Collect the following contact information:

A2.6.1. CE/CC's or BCE's name, rank, and phone number.

A2.6.2. Engineering officer's name, rank, and phone number.

A2.6.3. Superintendent's name, rank, and phone number.

A2.7. Dining Facilities. Answer the following questions to collect dining facilities information:

A2.7.1. What dining facility hours are available to deployed personnel for breakfast, lunch, dinner, and midnight shifts?

A2.7.2. Are there other dining facilities on base?

A2.7.3. Are there civilian dining facilities on base?

A2.8. Medical.

A2.8.1. Answer the following questions to collect medical information:

A2.8.2. What types of medical facilities are available on base?

A2.8.3. Does the deployed unit need to bring medical records?

A2.8.4. Is it air or ground MEDEVAC?

A2.8.5. What emergency forms are required?

A2.8.6. Does the deployed unit have blank copies of the required emergency forms?

A2.8.7. If an accident does occur, depending on the severity of the accident, what is the contact information for home station medical personnel?

A2.8.8. In the event of an accident during deployment, the following emergency contact information will be required:

A2.8.9. Emergency personnel phone number.

A2.8.10. MEDEVAC unit and phone number.

A2.9. Recreational Activities. Answer the following questions to collect recreational activities information:

A2.9.1. What types of recreational activities are available?

- A2.9.2. Does the base have an MWR program?
- A2.9.3. Can recreational equipment be checked out?
- A2.9.4. What information is available about group tours and local activities?
- A2.9.5. Are enlisted and officer clubs available on base?
- A2.9.6. Are recreational facilities on base (e.g., theaters, bowling alleys)?
- A2.9.7. Are chapel or religious services available?

A2.10. Miscellaneous. Collect the following miscellaneous information:

- A2.10.1. Availability of laundry facilities on base.
- A2.10.2. Availability of on- or off-base check-cashing facilities.
- A2.10.3. Availability of a BX, commissary, or other type of convenience store.

A2.11. OCONUS Deployments.

A2.11.1. Administrative. Answer the following questions to collect administrative information:

- A2.11.1.1. Are passports and or visas required for entry/exit from the host nation/base? Where is this information obtained and what are the procedures?
- A2.11.1.2. What are local customs and guidelines that the deployed unit should know?
- A2.11.1.3. What documents are required to clear customs upon entry/exit to the country?
- A2.11.1.4. Are entry/exit taxes required? What are the costs?
- A2.11.1.5. Are there duty-free items that may be taken in or out of the country?
- A2.11.1.6. What type of currency is used? What is the exchange rate?
- A2.11.1.7. Has military intelligence been contacted for a security briefing on the country?
- A2.11.1.8. Have medical personnel been contacted for a medical briefing on the country?
- A2.11.1.9. Are any special immunizations required?
- A2.11.1.10. If weapons are required for this deployment, what are the procedures for moving weapons in and out of the country?
- A2.11.1.11. Are any areas off-limits to military personnel?

A2.11.2. Special Conditions. Answer the following questions to collect information on any special conditions that may exist:

- A2.11.2.1. Are the training projects located on the base to which the unit will be deployed?
- A2.11.2.2. Is this a U.S. or host-country base?
- A2.11.2.3. If this is a host-country base, determine if the host nation/unit will provide the following:
 - A2.11.2.3.1. Billeting on base.
 - A2.11.2.3.2. Dining facilities.

A2.11.2.3.3. Transportation.

A2.11.2.3.4. Potable water source.

A2.11.2.3.5. Communications.

A2.11.2.3.6. Electrical power compatible with the deployed unit's tools.

A2.11.2.4. If projects are located away from the main base, ensure the following has been arranged:

A2.11.2.4.1. Transportation.

A2.11.2.4.2. Hot lunches.

A2.11.2.4.3. Material delivery.

A2.11.2.4.4. MEDEVAC procedures.

A2.12. OCONUS/CONUS Deployments in Austere Conditions. Austere or field conditions can vary from extremely harsh to mild environments and require special preparations in planning and executing a deployment. Safety is a key element on all deployments, but going into a harsh environment requires special considerations for personnel, working conditions, and travel. The OIC and NCOIC should consult medical personnel, Air Force survival manuals, and other sources to gather information about the environment in which the deployment will take place. This information should be distributed among deploying personnel.

A2.12.1. Administrative. Collect the following information:

A2.12.1.1. Home station emergency telephone numbers (during and after duty hours).

A2.12.1.2. American Red Cross phone number.

A2.12.1.3. Deployed location emergency telephone numbers (during and after duty hours).

A2.12.1.4. OCONUS emergency telephone numbers (during and after duty hours).

A2.12.1.5. If OCONUS, the International Red Cross telephone number.

A2.12.2. Quarters. Answer the following questions to collect quarters information:

A2.12.2.1. Is the deployed unit required to establish a base camp?

A2.12.2.2. Will the base camp be established on or adjacent to a host base?

A2.12.2.3. Will the base camp be established at or near the project site?

A2.12.2.4. Will the deployed unit be required to bring any mobility assets? If yes, does this change airlift requirements?

A2.12.2.5. Are A, B, or C bags required on this deployment?

A2.12.3. Messing. Answer the following questions to collect messing information:

A2.12.3.1. Will a mobile kitchen trailer (MKT) be needed?

A2.12.3.2. Will Meals Ready to Eat (MRE) be required?

A2.12.3.3. Will a water trailer be required?

A2.12.3.4. Has the food services function been contacted?

A2.12.3.5. Will generator power be required? If so, how many units?

A2.12.3.6. Are there any communications (phone/radio) in or out of the base camp?

A2.12.4. Personnel Hygiene. Answer the following questions to collect hygiene information:

A2.12.4.1. Are established shower/latrine facilities located at the base camp?

A2.12.4.2. Are latrine facilities at the project site?

A2.12.4.3. Is there potable water at the project site?

A2.12.4.4. Are there local insects/reptiles that personnel should be aware of?

A2.12.4.5. Will a medic be required on this deployment?